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Perception on the Importance of Technology in Education Among Hospitality Management Students at Northeastern College

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Abstract

The purpose of this study is to examine the perceptions of Northeastern College Hospitality Management Students regarding the importance and use of technology in their education. To do this, the researchers conducted a mixed-methods survey of 476 students to determine their level of technological awareness, usage frequency of tools, and how technology/technology resources have impacted their academic achievement. It was found that most students responded that they believe technology is "Important", particularly for the purpose of improving communication, and therefore improving their academic grades. The most used technological tools are social media and basic productivity software, whereas specialized Hospitality applications are used less frequently. Overall, while the participants expressed a high degree of belief in the advantages that technology offers, they also reported having a variety of barriers, such as unreliable internet access, limited personal device access, and inadequate advanced technical training. The researchers concluded that even though the students have a strong desire to be a part of the digital transformation, post-secondary schools must provide the necessary infrastructure, as well as the appropriate level of professional training to assist their students in overcoming the discrepancy between their basic digital literacy and the required industry-relevant skill set.

Keywords: hospitality management students, technology application, academic performance

1. Introduction

In the 21st century, technology has profoundly reshaped global education, transforming how students engage with learning, interact with instructors, and demonstrate outcomes. Higher education institutions increasingly adopt technology-enhanced environments to boost engagement, optimize performance, and prepare graduates for digitally driven industries. This shift is especially critical in hospitality, where

professional practice now relies on platforms such as property management systems (PMS), online booking engines, and customer relationship management (CRM) software. Hospitality management education must therefore equip students with both technological awareness and practical application skills to ensure academic and professional success.

Recent studies highlight the strong link between digital proficiency and student achievement.

Dela Cruz (2023) emphasized technology's impact on hospitality curricula, while Lopez and Ramos (2023) noted that students' perceptions of learning modalities depend on their ability to navigate digital processes. Nejar, Monsale, and Esbieto (2024) further stressed that systemic challenges, such as poor internet connectivity, hinder academic progress, underscoring the need for robust technological competence.

Despite global recognition of technology's role, gaps remain in understanding how students in specific contexts engage with digital tools. This study focuses on two dimensions: technological awareness (knowledge of tools) and technological application (practical use in academic tasks). Awareness without application wastes resources, while application without full understanding risks inefficiency. Examining their interplay is essential to assess technology's contribution to academic success.

At Northeastern College, hospitality management students regularly encounter digital platforms in their training. Yet, the extent of their awareness and application—and how these relate to academic performance—has not been systematically studied. Addressing this gap will provide valuable insights for curriculum design, faculty development, and institutional policies aimed at strengthening technological competence. Ultimately, this research will enrich discourse on technology in higher education, offering contextual findings within Filipino hospitality management programs.

1.1 Statement of the Problem

This study aimed to determine the perception of the students on the importance of technology in education. This study sought to answer the following questions:

- 1) What is the profile of participants as to:
 - Age
 - Year Level
 - Gender
 - Access to personal device
 - Internet Connectivity at home
- 2) What is the perceived importance of technology in education among Hospitality Management student at Northeastern College?
- 3) How frequently and effectively do students apply technology in their academic tasks?

- 4) What are the students' perceptions of the use of technology in enhancing academic performance?
- 5) What barriers hinder the effective use of technology in academic settings?

2. Methodology

This chapter is mainly concerned with the research method used in the study, the locale, the participants, the research instruments, the research procedures, and the statistical treatment of data.

2.1 Research Design

This study used mixed methods to look at how Hospitality Management students view the importance of technology in education. It also aimed to identify how students experienced obstacles when using technology in their education. Using both quantitative and qualitative methods allows for a better understanding of the topic than either method could provide on its own. The quantitative part measured numbers from surveys, while the qualitative part added richness to the numeric data by providing context for the numbers through student voice when cross referenced with the quantitative data.

2.2 Participants of the Study

The study's population comprised all hospitality management students enrolled at Northeastern College for the academic year 2025-2026. A stratified random sampling method was employed to select a representative sample of students, ensuring that each year level was represented in proportion to its size. Using Slovin's formula with a 5% margin of error, the researcher determined that the final sample size was sufficient to represent the population of the participants. This made sure that the results could be applied to the larger student population.

2.3 Instrumentation

The primary instrument employed in this study was a structured survey questionnaire adapted from Salacop and Basmayor (2024) completed by the participants. This questionnaire had four main parts, each of which was connected to the research goals.

Profile of the Participants. This section included a checklist to collect demographic and personal information regarding the respondents, including their age, year level, gender, and information about their technology, including

their access to a personal device and the stability of their internet connection.

Awareness of Educational Technology. This section consisted of items assessing students' perceptions regarding the technology available to us as an educational institution and required to use it via hospitality management (hospitality management) and institutional technology standards. The items were evaluated according to a 4-point Likert scale of 1 (Not Important) to 4 (Very Important).

Frequency of Use of Technology in Education. This part of the questionnaire measured the number of times students use technology to complete various educational tasks while providing information on the main academic purpose for which they use technology. The items were evaluated using a 4-point Likert Scale (ranging from 1 - Never to 4 - Always).

Perception of the Use of Technology in Enhancing Academic Performance. This part of the questionnaire assessed the students' perceptions of technological integration. It is designed to gauge how students value technology as a catalyst for academic success and professional preparation within the hospitality sector. The items were evaluated using a 4-point Likert Scale (ranging from 1 - Strongly Disagree to 4 - Strongly Agree).

In addition, an open-ended question will be added to identify barriers to effective utilization of technology within an educational environment. The tool was developed through extensive test use by a group of educational technology professionals and professional hospitality management experts to ensure that it works as intended; both the validators (using Cronbach's alpha) and a separate group of hospitality management undergraduate students from a different institution who were not included in the research study assessed the scales. The internal consistency of the scales was measured at well over an acceptable 0.70 level of reliability. The reliability testing indicated internal consistency of 0.983.

2.4 Data Gathering Procedure

The first part of the study was approved by the Ethics Review Committee of St. Paul University Philippines to ensure compliance with standards of research practice. After securing ethical approval, the researchers sought and received institutional endorsement from the Dean of the Graduate School and the Dean of the College of

Hospitality Management at Northeastern College, providing authority for the researchers to access the desired population.

Before data collection could begin, all research instruments underwent extensive validation processes to ensure that the items were clear, appropriate, and met the objectives of the study. Following validation, student-participants were given detailed information about the purpose of the study, the voluntary nature of their participation, and the methods in place to ensure confidentiality. All participants completed an informed consent form prior to the start of the data collection.

The data were collected systematically and in a controlled manner using Internet-based survey software (Microsoft Forms). Sessions were completed under the supervision of the researcher in order to ensure a high response rate and to provide instructions on how to complete the survey while not influencing participant responses. Once all data were collected, the responses were reviewed by the researchers to ensure completeness and accuracy, at which point the data were transferred to Jamovi statistical analysis software for further analysis. All participant information was anonymized, to maintain the confidentiality of all participants and to conform to the strictest standards of data privacy.

2.5 Data Analysis

The recorded data were analyzed using appropriate methods as follows:

Frequency and Percentage. This method was used to elicit information regarding the demographic and technological profile of the participants (e.g., age, year level, gender, access to personal devices, internet connectivity at home).

Weighted Mean and Standard Deviation. These two descriptive statistics were used to determine the perceived importance of technology in education and the frequency and effectiveness in which technology has been applied to academic tasks; therefore, the students' perceptions about how technology improves academic success are being assessed. The weighted means for each indicator were interpreted according to a four-point scale.

Statistical Software. All data collected in this research study were processed and analysed using the statistical package called Jamovi to ensure all the descriptive results from the research are accurate and that the research

objectives have been achieved.

Additionally, the researcher employed Braun and Clarke's six phases of thematic analysis to interpret the qualitative data derived from the open-ended questions, encompassing the following steps: First, the researcher read the data carefully to become familiar with the qualitative responses. After that, the researcher makes and uses initial codes to find patterns. Then use these codes to identify possible themes. Next, the researcher revisits these themes to refine them. Make sure to back up the data, then name and define the final themes. Lastly, write up the analysis and back up your claims with quotes.

3. Results and Discussion

This section should present the summary of specific outcomes of the research. This part should contain the results, the interpretation as well as literature support as part of the discussion. Data presentation is by objectives; may include theory generation and critique of the methodology.

Table 1. Participants Demographic Profile

Frequencies of Age

Age	Counts	% of Total
17-19 y/o	210	44.1%
20-22 y/o	237	49.8%
23-25 y/o	21	4.4%
26-28 y/o	6	1.3%
29 y/o above	2	0.4%

Frequencies of Year Level

Year Level	Counts	% of Total
1st Year	169	35.5%
2nd Year	95	20.0%
3rd Year	120	25.2%

Frequencies of Year Level

Year Level	Counts	% of Total
4th Year	92	19.3%

Frequencies of Gender

Gender	Counts	% of Total
Female	284	59.7%
Male	192	40.3%

Frequencies of Access to personal device:

Access to personal device:	Counts	% of Total
No	36	7.6%
Yes	440	92.4%

Frequencies of Internet connectivity at home:

Internet connectivity at home:	Counts	% of Total
Intermittent	76	16.0%
None	45	9.5%
Stable	355	74.6%

Table 1 presents the profile of the participants in terms of age, year level, gender, personal device use and internet connectivity at home. The table shows that as to age, most or 41.8% are 20-22 years old and most or 35.5% are first year level. Majority or 59.7% are female, while 92.4% or majority have access to personal device and finally, majority or 74.6% have stable internet connection.

Table 2. Awareness of Educational Technologies

	Mean	SD	DI
Technology increases academic performance (e.g. grades).	3.00	0.818	I
Technology promotes collaboration and participation.	2.98	0.805	I
Technology promotes the development of communication skills (e.g., writing and presentation skills).	3.04	0.822	I
Technology is an effective tool for students to develop their abilities.	2.96	0.850	I
Using technology effectively will help me earn a living.	2.86	0.797	I
Learning the use of technology is worthwhile and necessary subject.	2.89	0.784	I
The use of technology will be necessary for the rest of my life.	2.88	0.812	I
try to use technology since I know how useful it is.	2.94	0.793	I
Overall Mean	2.94	0.701	I

The data presented in Table 2 shows that, on average, students in the Hospitality Management program at Northeastern College view technology as being vital to their education as evidenced by an overall mean score of 2.94 with “Important” being the Descriptive Interpretation (DI). The highest rated indicator rated (Mean = 3.04) was for students’ appreciation of how technology allows for the enhancement of communication skills such as writing or presentation. The second highest rated indicator (Mean = 3.00) pertained to respondents’ perceptions of how technology applies positively towards academic performance.

While all indicators received scores that fell within the “Important” band, there is notably less emphasis on the value of technology applying positively towards employment (Mean = 2.86) compared to its current utility. This suggests that while BSHM students appreciate the impact of technology on their academic success, they do not perceive it as having quite the same impact on income from their future employment. However, across these four areas of inquiry it is evident from this data that students collectively agree that educational technology is an important, meaningful, and beneficial resource to their educational and professional growth.

The results from Northeastern College provide a nuanced view of how Hospitality Management students in the Philippines use technology. There

remains a notable disparity between students’ self-assessed proficiency and confidence in utilizing technology, particularly in problem-solving contexts, and their acknowledgment of its importance, despite a moderate level of awareness. This difference is a sign of broader problems in Philippine higher education, where students face many challenges that make it hard for them to use educational technologies effectively, such as poor infrastructure and a lack of technical support (Barrot et al., 2021).

Also, students’ positive views on how technology can help them communicate and do better in school show that they are ready to use these tools to get ahead in their careers. However, teachers’ complaints about new technologies indicate that they need to find better ways to teach. For instance, incorporating comprehensive digital literacy curricula could enhance students’ acquisition of essential technical skills, thereby addressing the self-efficacy deficiencies identified in the findings (Anthonysamy, 2022; Garcia, 2017; Chen & Wang, 2023). Finally, using social learning models that promote cooperation and knowledge sharing among peers may also help students solve problems more effectively and use technology more. This strategy is essential in the rapidly changing digital world created by the COVID-19 pandemic, where online learning and adapting to new technologies are now necessary for academic success

(Simamora, 2020).

Table 3. Most Frequent Technology Application Used by Hospitality Management Students

	Mean	SD	QI
Learning Management Systems (e.g., Google Classroom, Moodle) for submitting assignments	2.78	0.868	O
Simulation software (e.g., OPERA, Cloudbeds) for practical exercises	2.56	0.830	O
Productivity tools (e.g., MS Word, Excel, Canva) for projects and reports	2.99	0.837	O
Online databases (e.g., Google Scholar, JSTOR) for research	2.80	0.822	O
Communication platforms (e.g., Zoom, MS Teams) for group work	2.78	0.847	O
Mobile apps (e.g., Google Keep, Notion) for organizing academic tasks	2.86	0.835	O
Hospitality-related software (e.g., POS systems, reservation platforms) for course simulations	2.72	0.843	O
Social media (e.g., Facebook groups, Messenger) for academic coordination and updates	3.07	0.859	O
File-sharing platforms (e.g., Google Drive, Dropbox) for collaborative academic work	2.95	0.816	O
E-books and digital libraries (e.g., LibGen, institutional e-resources) for academic reading	2.74	0.838	O
Online quizzes and assessment tools (e.g., Kahoot, Quizizz) for review and evaluation	2.77	0.831	O
Video platforms (e.g., YouTube, Coursera) for supplemental learning	2.98	0.838	O
Overall Mean	2.83	0.684	O

Table 3 revealed that Hospitality Management students use many different types of technology tools in their studies, demonstrating a mean score of 2.83 and being categorized as “often.” The most used applications include social media for academic collaboration (mean of 3.07) and productivity applications (mean of 2.99), indicating that students use digital resources to collaborate and create content.

Although specialized hospitality simulation software rated the lowest for frequency (mean of 2.56), it falls within the “often” category, showing that there is a consistent foundation of technical engagement across programs. The average standard deviations (ranging from 0.816 to 0.868) also indicate that there is a consistent application

of these technologies, suggesting that digital resources (LMS and video-based supplemental materials) are used uniformly and integrally in students’ academic workflow.

The findings of this study reveal significant challenges faced by hospitality management students at Northeastern College, particularly in light of the changing educational environment in the Philippines. The moderate level of technology use may indicate that students recognize technology as playing an essential role. Still, they might not be well-trained or equipped to integrate this tool into their academic activities. This finding supports those of other studies, which report that hospitality management graduates possess basic digital skills but clearly

lack the advanced competencies necessary for industry-relevant employment (Stylianou & Pericleous, 2025).

In addition, the dominance of social media and basic productivity apps reminds us that people can stick to what they know, even when it leads to poor teaching or poor work (Anastasiou, 2020). This reliance may inadvertently prevent students from developing the skills needed for a technology-infused hospitality industry. It is worrisome that even more specialized programs, such as simulation software and learning

management systems, which are vital for immersing oneself in learning or hands-on practice, are not being utilized. This would indicate that institutions are not offering effective practical oriented training (Ashokkumar & Sangeetha, 2024). To bridge this gap, the academic curriculum must be closely aligned with industry requirements. This points out that teachers must integrate technological training, and that it should be more advanced, so that computer technology benefits students at school and helps them land jobs in a competitive job market (Neroorkar, 2022).

Table 4. Perceptions of the Use of Technology to Enhance Academic Performance

	Mean	SD	QI
I believe technology helps improve my academic performance.	3.03	0.786	A
I can identify specific technologies that have positively impacted my learning.	2.94	0.788	A
My academic performance improves when I use technology effectively.	2.95	0.778	A
I am motivated to learn when academic tasks involve technology.	2.91	0.761	A
I can complete academic tasks more efficiently with the help of technology.	3.01	0.780	A
I regularly use technology to review lessons and prepare for assessments.	2.96	0.776	A
I receive timely feedback from instructors through digital platforms.	2.89	0.792	A
I collaborate more effectively with classmates using communication and file-sharing tools.	2.99	0.783	A
I believe my future career in hospitality will benefit from my current use of academic technology.	3.00	0.775	A
I receive adequate support from the institution in using academic technologies.	2.90	0.778	A
I am interested in learning more about new technologies that can support my academic growth.	3.04	0.815	A
Overall Mean	2.96	0.680	A

The results in Table 4 show that students feel strongly that technology has a positive influence on their ability to be successful in an academic setting (M=2.96, QI = Agree). The students are eager to continue keeping up with changing technology, as evidenced by the highest mean score (M = 3.04) for being interested in learning about new technology to accomplish more in

school and closely followed by having a belief that technology helps them perform better (M = 3.03).

Although all constructs received an average score of “Agree”, students perceived the need for timely feedback from instructors (M = 2.89) and for help gaining technology resources from their institution (M = 2.90) to be slightly less important

than their self-directed ability to accomplish things such as being efficient with the use of technology and being able to collaborate with others using technology. In addition to having consistent standard deviations of range ($SD = .761-.815$), students were consistent in their responses that technology is not simply a convenience but is an important resource for helping students be more productive with completing tasks, preparing for future job opportunities in the hospitality field, and creating a more dynamic/engaging educational experience.

Thus, it is essential to consider the social, cultural, and economic factors that influence students' emotions and their technology usage. The data show that people are interested in technology and think it can help them do better in school. This aligns with studies showing that Filipino college students generally prefer using digital technologies in school. For example, Garcia's study on the use of e-learning technology among Filipino college students (Garcia, 2017) shows this. People aren't sure they can fix technical problems, indicating they lack some of the skills they need. Organizations and training programs tailored to the needs of those who need them could help improve this.

Furthermore, students' feelings of being overwhelmed by digital tools align with research showing that electronic resources for students are becoming more complex and more common (Tamim et al., 2011). It is essential to address these problems in the Philippines because some communities may still be developing their digital infrastructure. It is necessary to spend money on both training and technology. Schools should provide students with what they need to learn and ensure they have someone to ask for help when they need to learn something new. Fixing these technical problems can make it easier to learn and grow in your career, which will help you get better grades in the end (Tibayde, 2025).

Barriers that hinder the effective use of technology in academic settings.

The open-ended responses demonstrate that several barriers make educational technology adoption difficult. These include poor internet, insufficient equipment, digital skills and training, unwillingness to adapt, appropriate cash, and social media distraction. These constraints make classroom technology use tougher, limiting students' digital resource use.

Academic technology utilization faces many challenges. Our theme analysis of qualitative interviews with hospitality management students demonstrates that they have inadequate internet connectivity and limited device availability. The synthesis lists the following technology use barriers. Poor internet connectivity, restricted device access, lack of digital skills and training, opposition to change, and cost constraints hinder technology in education. Insufficient Wi-Fi speed or connection prevents students from taking online classes, watching videos, or researching. Participant 9 mentions this notion.

"One barrier is poor internet connection. Slow or unstable Wi-Fi makes it difficult for students to join online classes, watch videos, or take online quizzes." **Participant 9**

Furthermore, Participant 27 and Participant 36 agree with this idea. They say that having slow internet makes it harder to learn online.

Common barriers to effective technology use in academics include poor internet, limited access to devices, lack of technical skills or training, insufficient school resources, resistance to change, and frequent technical issues. **Participant 27**

Barriers that hinder the effective use of technology in academic settings include limited access to devices and poor internet connectivity, which prevent students from fully engaging in digital learning... **Participant 36**

Research substantiates this finding, indicating that students often require dependable and sufficient internet access to effectively utilize online educational resources; its absence may adversely impact academic performance and engagement (Mohammed, 2025; Zhu et al., 2022).

Another crucial barrier is limited access to devices. Participant 30 mentioned the direct correlation between a lack of devices and academic performance. Participant 35 expanded this viewpoint by discussing how students' social status may limit their ability to procure necessary technology for their studies.

Common barriers include poor internet connection, lack of devices, limited digital skills, high technology costs, and insufficient training for students. **Participant 30**

The barriers that hinder the effective use of technology in academic settings are the funding/cost, poor infrastructure, resistance to

change, lack of time, and many more.

Participant 29

Social status of every student, especially those who cannot afford to provide their own equipment. **Participant 35**

This highlights the broader issue of how socio-economic factors influence educational equity. Prior studies suggest that students without adequate resources struggle to keep up with digital educational trends, further widening the academic achievement gap (Mphahlele et al., 2023; Srivastava, 2024).

Moreover, there is a lack of digital skills and training among educators, which has led them to use technology poorly. Participants stated that teachers lack experience in this field and that there is insufficient access to the internet and web technology training.

...Limited access to devices and the internet, lack of digital skills, and insufficient teacher training make integration difficult... **Participant 14**

Technology in academic settings is limited by unequal access, insufficient skills, and outdated resources that prevent smooth integration into learning... **Participant 31**

This is yet another example of the failure of educational institutions to equip students and teachers with the technical know-how they need, preventing technology integration from fully achieving its potential benefits. Research suggests that ongoing professional development is essential for teachers to gain confidence in using digital tools, a prerequisite for student success (Aloovi, 2025).

Resistance to change exists on both sides; educators resist it, while institutions of higher learning offer little encouragement to leap. This resistance reflects an ingrained culture in educational systems that prizes conventional teaching methods above innovative ones.

Barriers to using technology in academics include resource issues, cost, bad Wi-Fi, lack of devices, teacher-related factors (lack of training, time, confidence, resistance to change, belief in tech's value). **Participant 33**

The shift required to change these established habits is highly significant in terms of systems adjustments and policies, all of which highlight the need for comprehensive training and support at institutions of higher education as well as at each level within the system (Sharma, 2024).

Participants pointed out that financial difficulties also trouble them, as there are sometimes issues with capital funding when replacing obsolete equipment.

The barriers that hinder the effective use of technology in academic settings are the funding/cost, poor infrastructure, resistance to change, lack of time, and many more.

Participant 29

Financial constraints can stop schools from upgrading equipment, while outdated systems and unreliable technical support further slowdown implementation. **Participant 36**

The research supports this result, indicating that financial constraints are often a significant social determinant that impedes effective technology integration in academic institutions (Sharma, 2024).

Another critically important issue is poor student digital literacy and the distractions that result from this. For instance, in the words of one participant, students cannot manage their time well enough, and tasks often generate additional work rather than helping with studies.

Sometimes students do not know how to manage their time; at some point, students tend to use their time to use social media rather than study their modules. **Participant 19**

...Additionally, students may face distractions or low digital literacy, reducing the effectiveness of technology in improving academic performance. **Participant 36**

This problem is compounded by a lack of digital literacy, for inexperienced users may be unable to use websites effectively. It is vital to address these competencies through targeted digital literacy programs to improve academic outcomes in the future (Ofosu-Asare, 2024).

In conclusion, multifaceted solutions are needed to address problems such as a lack of devices, poor network access, resistance to change, and low digital skills. Therefore, targeted interventions that address these obstacles could significantly improve student academic performance, particularly in fields where technology plays an increasingly significant role, such as hospitality management.

4. Conclusion

Students in the hospitality management program enrolled in Northeastern College hold technology in very high esteem. They feel that

technology is fundamental to their academic success and career readiness. Further, they are comfortable with general-purpose technology like social media, Canva, and basic productivity software, but they demonstrate limited familiarity with your industry-specific applications such as POS systems and simulation software (OPERA). Therefore, while students are broadly digitally literate, they do not have access to the specialized technical training needed to make the transition seamlessly from an academic setting to a professional environment.

The effective use of technology has been further complicated by systemic barriers such as poor internet access and too many digital solutions. These structural issues, along with students' self-reported lack of confidence in troubleshooting sophisticated systems, have resulted in a disconnect between students' enthusiasm for technology and their ability to use it effectively. The institution must work to eliminate the economic and cultural barriers faced by faculty, while also making investments in specialized infrastructure to move students beyond basic digital competencies to professional competence with technology.

5. Recommendation/s

Based on the results and conclusions of this study, the researcher comes up with the following recommendations:

5.1 To the Administration of Northeastern College

To support the 25.5% of students who report not having internet at home or having it only sometimes, the school could spend money to build out and advertise free, reliable, high-speed internet access areas on campus, such as computer laboratories or study centers.

Teachers should be told to make crucial course materials, assignments, and lectures available in formats accessible offline. This will aid students' academic development by making it less likely that they will only use the internet periodically.

Provide funds to train teachers to use new digital tools in the classroom to improve their lessons. This will help students learn how to use these tools and make it more likely that they will use them.

5.2 To Teachers

Add a comprehensive course on digital literacy at the beginning of the Hospitality Management program. This lesson should teach more than just basic office software. It should also introduce

tools relevant to the real world. This should include formal training on how to use academic databases, the LMS, and the specialty simulation software used the least.

To aid students who feel "overwhelmed" by the number of digital resources, the school might limit the number of official platforms used for homework and make them easier to use. This would give everyone a clear, uniform guide for all the tools they need.

Give students group assignments that require them to use their tech abilities. This will help them learn from each other, boost their confidence, and figure out how to work together to solve difficulties.

5.3 To Students

Make core classes use and demand additional hospitality-related simulation software, such as OPERA, Cloudbeds, and POS systems. This will do more than educate in theory; it will also ensure that students acquire the hands-on experience they need for the job.

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From Lost Love to Discovered Knowledge: The Role of Postgraduate Education in Overcoming Heartbreak

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Abstract

Heartbreak is a profound emotional experience that often results in significant psychological impacts. Although numerous studies have examined the emotional aspects of heartbreak, few have investigated how education, particularly at the postgraduate level, contributes to the recovery process. This article aims to describe the relationship between the experience of heartbreak and engagement in postgraduate education, with a focus on how advanced education helps individuals discover new meaning, enhance personal skills, and foster emotional growth. This study employed a qualitative approach using in-depth interviews with postgraduate students who had experienced heartbreak before or during their studies. The findings indicate that postgraduate education can serve as a medium for personal transformation, through which individuals utilize the learning process to overcome feelings of emotional loss and rediscover their identity and purpose in life.

Keywords: heartbreak, postgraduate education, emotional recovery, self-transformation, personal growth

1. Introduction

Heartbreak is an emotional condition that arises from the loss or termination of a meaningful relationship, particularly a romantic relationship. This experience is often characterized by profound grief, sadness, disappointment, and even depression (Crowder et al., 2022). From a psychological perspective, heartbreak can lead to significant changes in an individual's emotional and cognitive functioning, such as loss of motivation, difficulty concentrating, sleep disturbances, and a decline in overall mental health (Slotter et al., 2010). Many individuals feel trapped in a cycle of negative emotions, making

it difficult for them to move forward with their lives and plan for the future. The healing process from heartbreak is not easy and often requires time and sustained effort (Fatimah et al., 2023).

Heartbreak involves various dimensions, including psychological, social, and cultural aspects (Malik & Vo, 2024). Psychologically, heartbreak encompasses a range of emotional reactions experienced by individuals. Research indicates that individuals who experience heartbreak often suffer from anxiety, depression, and a loss of interest in daily activities (Slotter et al., 2010). This finding is consistent with attachment theory, which suggests that

individuals who have strong emotional attachments to their partners experience greater impacts when those relationships end (Aritonang, 2023).

Several factors may influence the occurrence of heartbreak. First, emotional factors, such as emotional dependence on a partner, may make individuals more vulnerable to heartbreak when a relationship ends. Second, situational factors, such as sudden separation, infidelity, or the death of a loved one, may also serve as major triggers (Syafitri & Nurfitri, 2024). In addition, developmental factors, such as emotional immaturity during adolescence, may make it more difficult for individuals to cope with separation (Larson & Sbarra, 2015).

The effects of heartbreak vary considerably and can influence individuals both psychologically and physically. Psychologically, individuals experiencing heartbreak may suffer from symptoms of depression, anxiety, and sleep disturbances (Crowder et al., 2022). Research has shown that heartbreak can trigger physiological responses, such as elevated cortisol levels (the stress hormone), which may negatively affect physical health (Dunlop et al., 2021). Furthermore, heartbreak may also affect individuals' social relationships, causing them to withdraw from social interactions and feel isolated from their surrounding environment (Aritonang, 2023).

In coping with this condition, individuals often seek various ways to overcome these feelings and regain stability. One particularly interesting area of investigation is how education, especially postgraduate education, may contribute to the recovery process from heartbreak. Postgraduate education is often regarded as a means of developing professional and intellectual capabilities; however, the emotional dimension of this learning process has received limited attention (Archer, 2021). For those experiencing heartbreak, education can serve as a tool for redirecting attention, discovering new meaning, and even building a stronger identity.

In recent years, the phenomenon of heartbreak has attracted increasing attention within Indonesian society. With the growing complexity of modern life, many individuals who experience failure in romantic relationships face significant emotional challenges. Amid these dynamics, an interesting trend has emerged among those experiencing heartbreak: pursuing postgraduate

education. In Indonesia, an increasing number of individuals who have gone through a breakup or the end of an emotional relationship decide to pursue a master's degree as a means of coping with sadness and finding a new direction in life.

This trend is viewed as a unique form of coping mechanism, in which individuals use education as a means of shifting their focus away from emotional pain while simultaneously building a new foundation for their lives. Postgraduate education offers opportunities for deep self-reflection, through which individuals not only develop academic and professional competencies but also discover new meaning and restore identities that may have been destabilized by heartbreak. By pursuing a master's degree, they not only redirect their attention from painful emotional experiences but also explore new ways to grow intellectually and emotionally. This creates opportunities for more positive personal transformation, whereby the pain they experience is transformed into motivation to achieve greater goals.

Postgraduate education is a stage of higher education undertaken after the completion of undergraduate studies. These programs are designed to provide more advanced knowledge and specialized skills in a particular field while preparing individuals to contribute significantly to professional and academic domains (Widodo, 2022). In an increasingly complex global context, postgraduate education has become increasingly important for the development of high-quality human resources (Hill & Heron-Delaney, 2021).

Intellectual development constitutes a primary focus of postgraduate education. Students are expected to engage in a more critical and analytical learning process, in which they not only study existing theories but are also expected to contribute to the development of new knowledge through research (Muda et al., 2020). Academic independence is a crucial element, as postgraduate students must be capable of selecting research topics, designing studies, and analyzing findings independently. This process fosters the development of resilience as well as the ability to think systematically when addressing complex problems (Park & Kim, 2023).

Postgraduate education also functions as a means of acquiring specialized expertise. Unlike undergraduate education, which tends to be broader and more general, postgraduate studies

allow students to focus on more specific and in-depth fields of study that align with their interests and career needs (Archer, 2021). The expertise acquired through postgraduate studies is expected to enhance individuals' competitiveness in the labor market while enriching scientific understanding within the field (Zhang & Zhu, 2022).

Several factors encourage individuals to pursue postgraduate education. One of these is career development, as many professional positions require master's or doctoral qualifications, particularly in fields such as academia, research, and management (Archer, 2021). By obtaining a higher degree, individuals have greater opportunities for promotion, salary increases, and more significant responsibilities in the workplace (Hill & Heron-Delaney, 2021). In addition to professional considerations, postgraduate education often serves as a means for individuals to pursue self-improvement and rediscover their identity, particularly after experiencing emotionally challenging situations such as heartbreak. Heartbreak, which commonly results from the end of a romantic relationship, often leaves deep emotional wounds. For many individuals, pursuing postgraduate studies becomes a positive form of escape, enabling them to focus on intellectual and professional development while distancing themselves from the emotional pain they have experienced.

The trend of pursuing postgraduate studies after experiencing heartbreak has become increasingly prevalent in Indonesia. Education is perceived as a means of diverting attention from painful emotional experiences while pursuing academic achievements that can provide a sense of pride and personal accomplishment. Postgraduate education also creates opportunities to build new social networks, which can support emotional recovery through encouragement from classmates, lecturers, and other academic communities (Koshova et al., 2021). At the same time, postgraduate education presents considerable challenges. Students are often confronted with high levels of academic pressure, particularly when completing theses or dissertations (Muda et al., 2020). These challenges become even greater when students are simultaneously dealing with emotional difficulties such as heartbreak. Nevertheless, many find that these pressures become a source of motivation for growth, transforming pain into

a new strength for achieving greater accomplishments.

Therefore, postgraduate education is not merely about enhancing knowledge and skills; it also plays a role in emotional recovery and personal development. Such programs can help individuals rediscover meaning and purpose in life after experiencing traumatic events such as heartbreak. Through postgraduate studies, individuals can transform feelings of loss into opportunities for intellectual and emotional growth, making education a bridge toward self-recovery and more positive personal transformation. Based on this background, the present study aims to describe how postgraduate education can assist individuals experiencing heartbreak, with particular emphasis on the positive effects of postgraduate education on self-development, attentional redirection, and emotional recovery.

2. Method

This study employed a qualitative method with a case study approach. Qualitative research aims to describe experiences as they are perceived by individuals. This approach was selected to examine a case from multiple sources of data (Willig, 2013). Bennett and Elman (2006) stated that a case study is a "naturally occurring phenomenon with defined boundaries." Case study research seeks to explore phenomena in a focused, intensive, and in-depth manner. Percy et al. (2015) explained that case study research is a model that emphasizes the detailed development and examination of a bounded system involving one or several cases. Data analysis in this study was conducted through several stages, namely data collection, data reduction, data presentation, conclusion drawing, and data verification (Willig & Rogers, 2017).

3. Result

This study aimed to explore the role of postgraduate education in assisting individuals who have experienced heartbreak. Using a qualitative approach with a case study method, this research involved three Master's students in Psychology at Universitas Airlangga who had experienced heartbreak and subsequently decided to continue their studies. The findings indicate that postgraduate education functions not only as a means of enhancing academic knowledge but also as a tool for emotional recovery and personal development.

3.1 Participant Profiles

The participants in this study consisted of three female Master's students in Psychology at Universitas Airlangga who decided to pursue postgraduate studies after experiencing heartbreak. The participants were identified by the initials ID, aged 25 years; TNH, aged 23 years; and TA, aged 22 years. ID had been in a relationship for four years before experiencing a breakup, TNH had a longer relationship experience of six years before facing heartbreak, and TA had a shorter relationship experience of two years before experiencing a separation.

3.2 Research Findings

This study identified three major themes: shifting focus through education, increased independence and self-confidence, and self-reflection and personal growth.

Theme 1: Shifting Focus Through Education

All three participants reported that postgraduate education provided them with an opportunity to redirect their attention away from the emotional pain they experienced. The feeling of heartbreak made it seem as though their entire world had suddenly collapsed and fallen apart. As a result, each day felt burdensome, making it difficult to get out of bed, while memories continuously haunted their thoughts, leaving all three participants feeling empty and directionless, as if a part of themselves had been lost forever. Deciding to pursue postgraduate studies enabled the participants to find a way to divert their attention from such intense suffering. As soon as they entered the world of postgraduate education, a new sense of hope began to emerge within them. Moments spent attending classes, engaging in discussions with lecturers, and exchanging ideas with classmates made them feel as though they were rediscovering themselves. Whenever participants focused on coursework or research projects, they were able to momentarily forget the pain they had been experiencing.

By engaging in academic activities that required concentration and dedication, they felt more capable of coping with feelings of grief and sadness. Participation in meaningful activities, such as research and classroom discussions, helped prevent them from becoming trapped in negative thoughts associated with heartbreak. When the three participants enrolled in a particularly challenging course and were assigned to groups to complete a project, they initially felt insecure and fearful but gradually became more involved. As they began working

together, sharing ideas, and overcoming challenges, the participants developed strong bonds with their classmates.

Throughout this process, participants not only learned about the subjects they were studying but also gained an understanding of the power of social support and collaboration. The three participants worked hard, laughed, and shared stories with one another within their respective groups. In those moments, they experienced genuine friendship. They felt reconnected with other people, and this was an immensely valuable feeling. When they eventually presented the results of their hard work, they felt proud not only of the outcomes but also of the process they had undergone together. This experience gave them the strength to realize that, despite having experienced heartbreak, they still possessed the ability to achieve happiness and satisfaction in life.

Through postgraduate education, the three participants became more focused and less preoccupied with the past and with the individuals who had caused their heartbreak. They also discovered that education provided opportunities to explore interests and potentials that had long remained dormant. With each step forward in their studies, they felt increasingly empowered. Participants began to understand that shifting focus through education was not merely about leaving sadness behind but also about discovering new meaning in life. As they devoted time to learning and personal development, they felt as though they were rebuilding their lost identities. Previous research has shown that engagement in meaningful activities can help individuals cope with negative emotions (Malik & Vo, 2024). By focusing on their studies, participants felt that they could rediscover their life goals and redirect their attention away from painful emotional suffering.

Theme 2: Increased Independence and Self-Confidence

Through postgraduate education, participants felt that they were able to develop greater independence and self-confidence. When heartbreak struck, life seemed to come to a halt, with every passing second carrying a heavy burden on their hearts. The beautiful moments they had once shared with their partners now left only deep pain. Participants felt like strangers within their own lives, trapped in memories that continuously disturbed their thoughts. During those times, they lost not only love but also their

self-confidence and sense of purpose. Amid this darkness, participants knew they had to rise again. Pursuing postgraduate studies appeared to be a highly challenging step, yet it also felt like a calling to rediscover themselves.

Participants learned how to design research, analyze data, and contribute to academic discussions. As they became involved in the learning process, something remarkable occurred. Although they initially felt like a burden to themselves, they gradually began to experience renewal. In every meeting and every discussion, participants developed a new passion for learning. Tasks that had initially seemed intimidating gradually became challenges they approached with enthusiasm. Participants began to realize that education was not merely about obtaining a degree but also about rediscovering hidden potential within themselves. This process not only enhanced their academic abilities but also provided a sense of achievement that was crucial in rebuilding their identities after experiencing heartbreak. Research by Krypel & Henderson-King (2010) emphasizes the importance of self-development in the process of emotional healing.

Participants came to understand that every step taken to learn and share knowledge represented a step toward rebuilding their self-confidence. Every completed assignment, every discussion they participated in, and every idea they shared made them feel stronger and more independent. Consequently, all three participants learned to rely on themselves. Although difficult moments still occurred, they came to understand that uncertainty is a natural part of the growth process. This educational experience not only provided them with knowledge but also taught them the true meaning of independence. The three participants began making decisions for themselves, designing study plans, and committing to the achievement of their goals. Throughout this process, they discovered strengths within themselves that they had never previously recognized. They learned that they were not only capable of overcoming pain and loss but also capable of rebuilding their lives in a better way.

When reflecting on this journey, the three participants expressed profound gratitude. The process was not always easy, but every challenge they encountered provided an opportunity for growth. Participants learned to accept themselves with all their strengths and weaknesses. Their

self-confidence developed alongside the achievements they attained, making them feel like warriors rising from adversity and preparing to face the world with renewed determination. Although painful memories from the past remained, the participants no longer felt defeated by them. Instead, they felt empowered and more confident. Every step they took in the academic world represented a step toward discovering their true selves. Consequently, all three participants became committed to continuing to learn, grow, and discover their inner strength. They believed that the independence and self-confidence they had developed would enable them to achieve their dreams and confront future challenges.

Theme 3: Social Support from the Academic Environment

Participants also reported that the academic environment within the postgraduate program provided much-needed social support. After experiencing devastating heartbreak, participants felt trapped in a lonely and dark world. The pain they experienced was profound, and they often felt isolated from those around them. Memories of their former partners repeatedly occupied their minds, creating a thick barrier between themselves and the outside world. Although participants attempted to appear fine, deep inside they felt overwhelming loneliness. During such times, they knew they needed support, yet they hesitated to open themselves up to others.

Interactions with classmates and lecturers created a safe space in which they could share experiences and receive emotional support. Upon entering the postgraduate program, participants discovered something different. The academic environment was filled with individuals who shared similar enthusiasm and vision. The three participants began interacting with classmates who not only shared common academic interests but also possessed diverse life experiences. On many occasions, they supported one another and shared stories about the difficulties they faced, including heartbreak and failure. Through these exchanges, participants felt connected and no longer alone. There was a profound sense of mutual understanding, as though everyone carried their own stories and burdens. As a result, participants realized that the social support they needed had been present all along, resembling a new family that supported and understood one another.

Support from lecturers was also highly meaningful to the participants. Lecturers not only taught with dedication but also cared about students' personal development by offering wise advice and encouraging them to continue moving forward. This academic environment was more than merely a place to learn; it was a space where participants could find the support they needed. When lecturers encouraged students to think critically and explore new ideas, it fostered enthusiasm and motivation among the participants to become more reflective and critical regarding themselves and their past experiences. The teaching approach of postgraduate lecturers created an atmosphere in which students felt comfortable sharing, asking questions, and even expressing their concerns. Through this process, participants realized that lecturer support was not solely about imparting knowledge but also about creating a safe space where students could grow and learn from one another.

Over time, the three participants realized that social support from the academic environment not only helped them overcome heartbreak but also provided them with the strength to rise again. Looking back on this journey, they felt deeply grateful for all the support they had received from the academic environment. This social support gave them the strength to confront the pain they had experienced and helped them rebuild their identities. Participants learned that opening themselves to others and seeking support was not a sign of weakness but rather a powerful step toward healing.

The three participants no longer felt isolated. They had developed networks of friends who were always ready to support them, helping them not only face academic challenges but also navigate their emotional journeys. Participants realized that they possessed the strength to move forward, and the academic environment had become a place where they could grow and develop. With such support, they felt stronger and more confident. Participants knew that they could overcome whatever obstacles lay ahead because they were not alone. This social support transformed their lives, and they became committed to appreciating and giving back to those who had helped them throughout this journey. This finding is consistent with attachment theory, which suggests that social support can accelerate the healing process from emotional trauma (Crowder et al., 2022).

4. Discussion

Heartbreak is a complex and often painful emotional phenomenon that can profoundly affect individuals (Larson & Sbarra, 2015). In this context, postgraduate education emerges as an effective coping mechanism. This study demonstrates that postgraduate education functions not only as a means of enhancing academic knowledge but also as a tool for emotional recovery and personal development. Through education, individuals who experience heartbreak can rediscover meaning and purpose in life, which in turn helps them recover from emotional distress (Giawa & Telaumbanua, 2023).

One of the major themes identified in this study is the redirection of focus through education. The three participants reported that postgraduate education provided them with an opportunity to divert their attention away from the emotional pain they experienced. When engaged in academic activities requiring concentration and dedication, they felt more capable of coping with feelings of grief and sadness. Previous research has shown that participation in meaningful activities can help individuals overcome negative emotions (Norona et al., 2018). This redirection of focus enabled them to alleviate negative feelings, such as sadness and frustration, and facilitated the process of emotional recovery (Dunlop et al., 2021). This finding is consistent with previous studies suggesting that engagement in meaningful activities can help individuals cope with emotional trauma (Bravo et al., 2017). Thus, postgraduate education serves not only as a means of learning but also as a space where individuals can rediscover themselves and shift their attention away from painful memories.

Furthermore, postgraduate education also contributes to increased independence and self-confidence (Archer, 2021). As participants became involved in the learning process, they gradually rediscovered personal potential that had long remained dormant. Engagement in demanding academic tasks, such as research and presentations, helped participants rebuild the self-confidence that had been diminished by heartbreak. This process required them to make independent decisions and confidently express their ideas in academic forums, ultimately helping them recognize latent abilities they had not previously acknowledged. Every successfully completed assignment and every discussion in which they participated provided a sense of achievement that was essential in reconstructing

their identities after experiencing heartbreak. The growth of self-confidence throughout their academic journey demonstrates that education is not solely about mastering knowledge but also about character and identity formation (Koshova et al., 2021). The learning process, which involves critical and analytical thinking, provided participants with opportunities to explore their intellectual abilities more deeply, contributing to greater emotional and psychological independence (Hidayati et al., 2020). Research by Aritonang (2023) emphasizes the importance of self-development in the emotional healing process, which is consistent with the experiences of the participants in this study. Therefore, postgraduate education not only imparts knowledge but also teaches the true meaning of independence and self-confidence.

Social support from the academic environment also emerged as an important factor in the recovery process from heartbreak (Field, 2011). Participants reported that interactions with classmates and lecturers created a safe space in which they could share experiences and receive emotional support. An academic environment filled with individuals who shared similar enthusiasm and aspirations fostered a deep sense of mutual understanding (Lapina, 2018). Research indicates that social support can accelerate recovery from emotional trauma (Aritonang, 2023). Consequently, postgraduate education functions not only as a place of learning but also as a community in which individuals can find the support they need to overcome adversity.

In a broader context, postgraduate education also contributes to the development of high-quality human resources (Hill & Heron-Delaney, 2021). In an increasingly complex world, postgraduate education has become more important in preparing individuals to face challenges in professional and academic settings. By obtaining higher academic qualifications, individuals gain greater opportunities for promotion and more substantial responsibilities in the workplace (Sukmawati et al., 2023). Therefore, pursuing postgraduate education after experiencing heartbreak can be viewed as a strategic step not only for emotional recovery but also for enhancing future career prospects.

However, the challenges associated with postgraduate education cannot be overlooked. Students are often confronted with considerable academic pressure, particularly in completing

theses or dissertations (Rioli & Savicki, 2010). These challenges become even more demanding when students are simultaneously coping with emotional difficulties such as heartbreak. Nevertheless, many individuals find that such pressures become a source of motivation for growth, transforming emotional pain into a new strength that drives greater achievement (Malik & Vo, 2024). This finding suggests that postgraduate education can function as a tool for positive personal transformation (Saiti et al., 2017).

Postgraduate education also provides opportunities for deep self-reflection (Shuo et al., 2022). Throughout the learning process, individuals not only develop academic and professional competencies but also discover new meaning and restore identities that may have been destabilized by heartbreak. By pursuing a master's degree, they not only redirect their attention away from painful emotional experiences but also explore new ways of developing intellectually and emotionally. This creates opportunities for more positive personal transformation, in which the pain they experience is transformed into motivation to achieve greater goals (Shuo et al., 2022).

Through postgraduate education, individuals can build new social networks that support the process of emotional recovery. Support from classmates, lecturers, and the broader academic community can provide a sense of connectedness that is especially needed after experiencing heartbreak. Research has demonstrated that social support can accelerate recovery from emotional trauma (Norona et al., 2018). Thus, postgraduate education functions not only as a place of learning but also as a community where individuals can find the support necessary to recover from adversity.

The findings of this study have important implications for the fields of education and psychology, particularly in understanding how education can assist individuals in coping with emotional crises. These findings offer new insights into the role of education as a coping mechanism, whereby academic activities can function as tools for emotional recovery. This study highlights the potential of postgraduate education as an effective means of helping individuals overcome heartbreak and discover new meaning in their lives. Education functions not only as a tool for intellectual development but also as a platform for emotional and personal

growth.

In conclusion, postgraduate education plays a significant role in helping individuals who experience heartbreak. Through the redirection of focus, the enhancement of independence and self-confidence, and the provision of social support from the academic environment, postgraduate education can serve as a powerful tool for emotional recovery and personal development. Therefore, pursuing postgraduate education after experiencing heartbreak can be viewed as a strategic step not only for emotional healing but also for improving future career prospects. This study provides valuable insights into how education can function as a bridge toward self-recovery and positive personal transformation.

5. Conclusion

Postgraduate education plays a significant role in assisting individuals who experience heartbreak, a complex and often painful emotional condition. This study found that education functions not only as a means of enhancing academic knowledge but also as a tool for emotional recovery and personal development. The three major themes identified in this study, namely shifting focus through education, increased independence and self-confidence, and social support from the academic environment, demonstrate how postgraduate education can serve as an effective coping mechanism for individuals facing the distress associated with heartbreak.

First, shifting focus through education enables individuals to redirect their attention away from emotional pain. Engagement in academic activities that require concentration and dedication helps individuals alleviate negative emotions and rediscover meaning in life. Second, postgraduate education contributes to increased independence and self-confidence. Through the demands of the learning process, individuals are able to explore previously untapped potential, thereby rebuilding their identities after experiencing heartbreak. Third, social support from the academic environment provides a much-needed sense of connectedness, creating a safe space for individuals to share experiences and receive emotional support.

Therefore, pursuing postgraduate education after experiencing heartbreak can be viewed as a strategic step not only for emotional recovery but also for enhancing future career prospects. This

study provides valuable insights into how education can function as a bridge toward self-recovery and more positive personal transformation while emphasizing the importance of education as a tool for emotional and personal growth.

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The Current Status and Reinforcement Pathways of Career Stickiness Among Public-Funded Teacher Trainees for Rural Schools in China

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Abstract

Public-funded teacher trainees' education in China represents a national strategic initiative aimed at precisely supplying high-quality teachers to rural schools. As prospective rural educators, these students constitute a vital force for building future rural teaching faculties. However, the persistent structural dilemma of "retaining personnel through contract compliance while failing to retain their commitment" continues to hinder their long-term engagement in rural education. To explore the internal mechanisms underlying their retention in rural teaching, this study adopts a mixed-methods design grounded in the eastern, western, and northern regions of Guangdong Province. Drawing on 128 valid questionnaires and 11 in-depth interviews, we empirically examine the current status of career stickiness among public-funded teacher trainees. The results indicate that their overall career stickiness is above the medium level, exhibiting a distinct pattern characterized by "normative dominance and emotional deficiency." Career choices are largely driven by external contractual constraints, whereas endogenous emotional identification and value commitment remain underdeveloped. To bridge this gap, we propose an integrated "three-pronged" support strategy: enhancing local identity at the emotional level, optimizing contractual mechanisms at the institutional level, and expanding professional growth pathways at the developmental level. We recommend coordinated efforts across universities, administrative agencies, and school management to facilitate a profound transition from "contractual compliance" to "emotional rootedness," thereby providing robust teacher support for rural educational revitalization.

Keywords: public-funded teacher trainees, career stickiness, emotional stickiness, normative stickiness

1. Introduction

China's public-funded teacher trainees policy—initially termed "free normal education" and later renamed—is a state-sponsored program designed to attract talented individuals into teaching and cultivate high-caliber educators

(Chen, 2007). These students fall into three main categories: (1) National public-funded teacher trainees, trained by six normal universities directly under the Ministry of Education (Yao, 2008); (2) Local public-funded teacher trainees, recruited and trained by provincial authorities to

serve rural or remote areas within their respective jurisdictions (Wang & Yang, 2018); and (3) The Targeted Teacher Special Training Program, a subcategory targeting central and western China's less-developed regions (Zhu, 2023). Public-funded teacher trainees' education constitutes a localized training model under the broader local policy framework, employing a "targeted recruitment, targeted cultivation, and targeted employment" structure to supply compulsory education teachers specifically for rural schools (Ruan & Wang, 2024). In Guangdong Province, for instance, the program launched in 2018 has produced five cohorts of graduates, significantly strengthening the teaching workforce in underdeveloped regions.

However, as the policy has matured, the primary challenge has shifted from "recruitment difficulty" to "retention difficulty" (Zhang & Yin, 2024). While binding contractual obligations have secured the short-term objective of ensuring public-funded teacher trainees' physical placement in rural schools, a sustainable mechanism for retaining them long-term and enhancing their instructional quality remains underdeveloped. Current evidence reveals that some in-service targeted teachers equate their mandatory service period with mere "contractual compliance," exhibiting passive engagement characterized by a physical presence but psychological detachment—in extreme cases, culminating in contractual breaches (Zhang & Xue, 2022). A notable proportion regard their assigned posts as mere "stepping stones," displaying a pronounced tendency toward utilitarian compliance. Without endogenous motivation to commit deeply to rural education, the structural dilemma of "easy compliance but difficult rootedness" persists. If such a mindset of passive, contract-bound compliance remains uncorrected, it will not only fail to substantially improve rural educational quality but also fundamentally contradict the original policy intent. Therefore, moving beyond unilateral contractual regulation to facilitate a paradigm shift—from perfunctory "contractual performance" to genuine "rootedness in rural communities"—has emerged as a critical imperative demanding urgent attention in both policy implementation and scholarly inquiry.

Existing literature predominantly examines retention through external factors—such as salary, job security, and rational-choice assumptions—yet lacks systematic attention to

individual psychological attachment mechanisms. Career stickiness theory offers a fitting analytical framework, transcending traditional turnover models by integrating four dimensions: affective commitment, normative obligation, continuance commitment, and perceived opportunity costs. Accordingly, this study employs a mixed-methods approach to investigate career stickiness among public-funded teacher trainees in Guangdong's less-developed regions. Three research questions guide our inquiry: (1) What is the overall level and structural profile of their career stickiness? (2) Do significant differences exist across demographic subgroups? (3) How can intervention pathways be constructed to facilitate their transition from passive "compliers" to active "rooted practitioners"?

2. Theoretical Framework and Literature Review

2.1 Theoretical Foundation: An Integrative Framework of Career Stickiness

Originating in organizational behavior, *career stickiness* refers to employees' loyalty, retention intention, and sustained engagement toward their profession, position, or organization. It reflects an intrinsic, multidimensional psychological attachment shaped by professional identity, growth opportunities, and contextual factors—encompassing both voluntary commitment and involuntary entrapment.

Building upon the three-dimensional structure of "organizational commitment" (Meyer & Allen, 1991), this study conceptualizes career stickiness across four dimensions: affective stickiness, normative stickiness, continuance stickiness, and opportunity-based stickiness. Affective stickiness denotes an individual's genuine identification with the goals and values of their profession, a desire ("want") to remain, and an emotional dependence manifesting as willingness to contribute proactively. It represents intrinsic belonging based on emotional identification. Normative stickiness reflects a sense of social responsibility and moral obligation, wherein individuals feel they "should" remain due to loyalty and perceived duty—a form of moral commitment grounded in contractual obligations. Continuance stickiness describes a situation where individuals feel "forced" to stay because leaving would entail losing accrued benefits (e.g., salary, seniority, specialized skills), making the switching costs prohibitively high. It

constitutes a conversion barrier rooted in sunk costs. Opportunity-based stickiness arises when limited external employment options mean individuals feel they “can only” remain in their current role. This dimension involves weighing external alternatives. These four dimensions, while distinct, are interrelated, collectively forming an integrative framework that captures the multifaceted dynamics—internal affect, external constraints, cost-benefit calculations, and environmental limitations—influencing public-funded teacher trainees’ retention decisions. To elucidate the formation mechanism of career stickiness, this study integrates Job Embeddedness Theory, Switching Cost Theory, and Employee Retention Theory as its theoretical lenses.

First, Job Embeddedness Theory (Mitchell & Lee, 2001) provides a macro-level structural perspective. Mitchell and Lee proposed the metaphor of a “web,” suggesting individuals are embedded within networks of social and professional connections. They identified three key elements: Links (formal and informal connections), Fit (perceived compatibility between the individual and their environment), and Sacrifice (perceived costs of leaving). In this study, affective stickiness maps onto the “fit” between targeted students and the rural educational context; normative stickiness reflects the strength of their “links” to the local community; and continuance stickiness quantifies the “sacrifice” entailed by departure. High career stickiness thus signifies a densely embedded state: the tighter the web, the greater the resistance to leaving.

Second, Switching Cost Theory reveals the economic logic underpinning stickiness. It categorizes switching costs into procedural (e.g., learning curve), financial (e.g., monetary losses), and psychological (e.g., uncertainty anxiety) dimensions (Yin et al., 2016). For public-funded teacher trainees, penalties for breach of contract, adverse records in personal archives, and the time and financial costs of re-taking civil service examinations constitute significant “continuance stickiness.” This economically rational “passive adhesion” explains why some students persist despite lacking emotional identification.

Finally, Employee Retention Theory contributes a dynamic perspective. Traditionally focused on turnover, this theory emphasizes understanding why employees stay. Holtom, Mitchell, and Lee (2006) highlighted the need to examine the

determinants of organizational attachment. The theory employs a “push-pull” framework: factors like rural education ethos and job stability exert “retention pull,” while urban high-salary offers and harsh rural living conditions generate “turnover push.” Career stickiness essentially represents an equilibrium state resulting from the interplay of these forces. A transition from passive compliance to active rootedness occurs when the pull derived from affect and norms sufficiently counterbalances the push from external opportunities.

2.2 Literature Review: Retention Intentions of Public-Funded Teacher Trainees

Scholarship on retention has focused on structural features, influencing factors, and mechanisms.

2.2.1 The Dual Structure of Retention Intentions

Retention intention is not monolithic but comprises distinct psychological components. A national survey of 2,514 public-funded teacher trainees across 20 local universities found that their intention consists of “contractual compliance intention” and “rural mission commitment,” with the former outweighing the latter by a factor of 1.73 (Shan et al., 2025a). Latent profile analysis further identifies five subtypes: Idealistic, Contractual, Ambivalent, Illusory, and Rejective (Zhou et al., 2024). Even among those “willing to stay,” the underlying motivations vary considerably. Longitudinal studies note a V-shaped fluctuation in retention intentions over four years of university, with students from rural hometowns exhibiting the strongest intentions (Shan, 2025b). These findings underscore the necessity of dissecting the internal structure of “retention intention.”

2.2.2 Influencing Factors of Retention Intentions

Individual attributes significantly shape retention intentions. Paradoxically, higher-achieving students with stronger comprehensive qualities tend to breach contracts and avoid returning to rural posts. For instance, students from elite provincial universities exhibit significantly lower return intentions than those from local institutions (Shan et al., 2025a). This suggests that higher competence may correlate with elevated career expectations, leading to aversion when confronted with limited development prospects in rural settings. Enrollment motivation is also pivotal: those motivated by “love for rural education” demonstrate stronger local sentiments (Liang,

2025). From a relational perspective, during university, targeted students face weakening cultural ties to rural areas, insufficient expansion of social connections, and increasingly negative self-perceptions regarding rural life. Conversely, those maintaining strong cultural connections with their hometowns show higher return intentions (Xie, 2025).

Environmental constraints are equally critical. Qualitative research characterizes targeted students' experience as "adrift within the establishment," oscillating between survival gaps and institutional rigidity, stability versus freedom, and professional dignity versus self-deprecation (Fan et al., 2026). Longitudinal tracking reveals widespread dissatisfaction regarding heavy workloads coupled with low salaries, and a significant mismatch between received and desired professional support (Ruan & Wang, 2024). Applying ERG theory, Zhao and Li (2024) identify: unmet survival needs, strained interpersonal relations, and constrained growth needs. When basic livelihood and career advancement are both compromised, retention intentions suffer severely. Furthermore, policy implementation exhibits structural flaws: inflexible entry-exit mechanisms, career "glass ceilings," imbalanced compensation neglecting emotional needs, and excessive emphasis on duties over rights (Zhang & Bai, n.d.). Even if pre-service cultivation fosters initial retention willingness, unsupportive institutional environments can erode it post-employment.

2.2.3 Mechanisms Underlying Retention Intentions

Research also explores the mechanisms at play. Motivation for teaching serves as a critical pathway from passive compliance to active rootedness. Teacher support positively predicts compliance intention, with professional identity partially mediating this relationship, moderated by teaching motivation (Zhang & Bai, n.d.). Regarding local integration, targeted students must navigate a progressive process: production integration → life integration → emotional

integration, to transition from written "contract" to spiritual "rootedness" (Liu & Yang, 2025). Overall, institutional constraints provide the push for staying, while emotional bonds with the locality exert the pull; their interaction ultimately determines retention decisions.

While existing research has advanced understanding of the features, factors, and mechanisms influencing retention, notable limitations remain. Most studies focus on pre-service intentions rather than the dynamic consolidation of retention behaviors. Moreover, nuanced distinctions among different motivational substrates of retention remain underexplored.

3. Research Design

3.1 Methodology

This study employs an explanatory sequential mixed-methods design, following a "quantitative-dominant, qualitative-complementary" logic. First, quantitative survey data were analyzed to statistically describe and infer the overall level of career stickiness and group differences. Subsequently, semi-structured interviews were conducted to uncover deep-seated psychological drivers and behavioral logics underlying the quantitative patterns. This integration of numerical breadth and narrative depth mitigates the limitations of mono-method approaches.

3.2 Participants

3.2.1 Quantitative Sample

The quantitative sample comprised in-service public-funded teacher trainees currently fulfilling their service obligations in the eastern, western, and northern regions of Guangdong. Using random sampling, 142 questionnaires were distributed. After excluding invalid responses, 128 valid questionnaires were retained (valid response rate = 90.14%). The demographic characteristics of the sample are presented in Table 1.

Table 1. Demographic Characteristics of Participants (N = 128)

Variable	Items	N	Percentage (%)
Gender	Male	31	24.22
	Female	97	75.78
Teaching Experience	1 year	91	71.09

Education Level	2 years	18	14.06
	3 years	8	6.25
	4 years	11	8.59
	Junior College	10	7.81
	Bachelor's	112	87.50
Home Location	Master's (incl. enrolled)	6	4.69
	Urban	33	25.78
	Rural	95	74.22

As shown in Table 1, the sample exhibits the following features: Females (75.78%) significantly outnumbered males, aligning with the typical gender distribution in teacher education programs. The majority (71.09%) had only one year of teaching experience, indicating they were novice teachers at a critical juncture for career adaptation and retention decisions. Most held a bachelor's degree (87.50%) or higher (4.69%), reflecting an upgrading of training standards. Notably, 74.22% hailed from rural hometowns, underscoring the "localized" nature of the recruitment. This structure closely mirrors the broader population of public-funded teacher trainees in Guangdong, supporting the sample's

representativeness.

3.2.2 Qualitative Sample

Following the survey, 11 participants were purposefully sampled for semi-structured interviews, adhering to maximum variation sampling principles (see Table 2). Selection ensured diversity in gender, rural/urban origin, and teaching experience to capture a range of typical cases. Online audio interviews lasted 20–40 minutes each. Verbatim transcripts were coded and analyzed to provide in-depth qualitative insights complementing the quantitative findings.

Table 2. Interview Participant Profiles

Code	Gender	Home Location	Teaching Experience	Subject
A01	Female	Urban	1 year	Primary Chinese
A02	Male	Rural	2 years	Secondary Music
A03	Female	Urban	2 years	Primary Chinese
A04	Male	Rural	1 year	Primary Chinese/English
A05	Female	Urban	1 year	Primary Math
A06	Female	Rural	3 years	Primary Chinese
A07	Female	Urban	2 years	Primary Math
A08	Female	Urban	2 years	Primary Math
A09	Female	Rural	2 years	Kindergarten
A10	Male	Unspecified	2 years	Primary Chinese
A11	Female	Rural	2 years	Primary Chinese/English

3.3 Instruments

3.3.1 Quantitative Instrument

The Career Stickiness Questionnaire for public-funded teacher trainees was developed based on the four-dimensional theoretical model. It comprises 20 items across four subscales: (1) Affective Stickiness (5 items; e.g., emotional

identification, sense of belonging); (2) Normative Stickiness (5 items; e.g., moral obligation, contract adherence); (3) Continuance Stickiness (5 items; e.g., sunk costs, switching barriers); and (4) Opportunity-Based Stickiness (5 items; e.g., perceived lack of alternatives). Items used a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), with higher scores indicating

stronger stickiness.

Reliability and validity tests demonstrated excellent psychometric properties (Table 3). Cronbach's α for the total scale was 0.940, and subscale α s ranged from 0.839 to 0.905, indicating high internal consistency. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.901, and Bartlett's Test of Sphericity was significant ($\chi^2 = 2156.37$, $p < .001$), confirming suitability for factor analysis and good structural validity.

Table 3. Reliability of Career Stickiness Scale

Dimension	Items	Cronbach's α
Emotional Stickiness	5	.905
Normative Stickiness	5	.850
Continuance Stickiness	5	.858
Opportunity Stickiness	5	.839
Total Scale	20	.940

3.3.2 Qualitative Instrument

A semi-structured interview protocol was developed, comprising 10 open-ended questions aligned with the four dimensions of career stickiness. Topics included enrollment motivations, emotional experiences in rural teaching, perceptions of contractual obligations, and career aspirations. The protocol incorporated perspectives from both "rooted" and potentially "leaving" teachers to comprehensively capture psychological states.

4. Results

4.1 Descriptive Statistics

Descriptive statistics for career stickiness are presented in Table 4. The overall mean score was 3.755 (SD= 0.690), exceeding the midpoint of 3. This indicates a relatively stable retention among the cohort, suggesting potential for fostering deeper "rootedness." However, the mean fell below the threshold for "high identification" (≥ 4), highlighting considerable room for improvement.

Table 4. Descriptive Statistics for Career Stickiness (N = 128)

Dimension	Min	Max	M	SD
Emotional Stickiness	1.00	5.00	3.602	0.915
Normative Stickiness	1.00	5.00	4.027	0.738

Dimension	Min	Max	M	SD
Continuance Stickiness	1.00	5.00	3.698	0.818
Opportunity Stickiness	1.00	5.00	3.694	0.776
Total	1.00	5.00	3.755	0.690

Comparisons across dimensions revealed a significant "one-core, multi-polar" imbalance: normative stickiness stood prominently high, while affective stickiness formed a distinct "lowland." Dimension means ranked as follows: Normative (M= 4.027) > Continuance (M= 3.698) > Opportunity-Based (M= 3.694) > Affective (M= 3.602).

Normative Stickiness Dominance: The highest score indicates that contractual spirit and social responsibility are the primary current anchors. While validating policy efficacy, this also implies retention is driven more by external obligation than internal volition.

Passive Stickiness Middle Ground: Continuance and opportunity-based stickiness, both forms of "passive stickiness," occupied the middle ranks. They reflect a rational compromise based on weighing sunk costs and external alternatives—staying "because one cannot leave easily" or "has nowhere better to go."

Affective Stickiness Deficiency: The lowest score on this critical bridge between "compliance" and "rootedness" reveals a pervasive risk of psychological disengagement ("present but absent"). The lack of endogenous motivation based on value identification constitutes the primary bottleneck hindering long-term commitment.

4.2 Correlation Analysis

Pearson correlation analysis (Table 5) revealed highly significant positive intercorrelations among all career stickiness dimensions ($p < .01$), indicating complex synergistic effects.

Table 5. Intercorrelations Between Career Stickiness Dimensions (N = 128)

	1	2	3	4
1. Emotional Stickiness	1			
2. Normative Stickiness	.778**	1		

	1	2	3	4
3. Continuance Stickiness	.537**	.532**	1	
4. Opportunity Stickiness	.574**	.608**	.760**	1

Note. ** $p < .01$.

High Coupling of Affect and Norm: The strong correlation ($r = .778$) between affective and normative stickiness suggests a symbiotic relationship: strong contractual responsibility can foster professional affect, while deep emotional identification reinforces compliance and conscientiousness. This provides a theoretical basis for facilitating the transition from passive to active rootedness.

Strong Linkage of Real-World Constraints: The very high correlation ($r = .760$) between continuance and opportunity-based stickiness forms a robust “real-world shackle.” Economic rationality plays a major role in retention

decisions. Crucially, such cost-benefit-based stickiness is fragile and may dissolve rapidly if external conditions improve (e.g., increased urban job opportunities).

Relative Independence of Affective Identification: Correlations between affective stickiness and the two “constraint” dimensions (continuance and opportunity-based) were comparatively lower ($r \approx .55$). This suggests affective identification, while influenced by practicalities, possesses a degree of autonomy. Enhancing affective stickiness may be the most effective strategy to resist external temptations and buffer against environmental hardships.

4.3 Non-Parametric Tests (Mann-Whitney U)

4.3.1 Gender

Mann-Whitney U tests (Table 6) indicated significant gender differences across all dimensions and total career stickiness ($p < .05$). Male teachers exhibited significantly higher stickiness levels than their female counterparts on all measures.

Table 6. Mann-Whitney U Test Results: Gender (Male vs. Female)

Dimension	Male (n= 31)	Female (n= 97)	U	Z	p
Emotional Stickiness	4.00 (3.4, 5.0)	3.60 (3.1, 4.0)	1092.0	-2.299	.021*
Normative Stickiness	4.20 (4.0, 4.8)	4.00 (3.6, 4.6)	1059.0	-2.491	.013*
Continuance Stickiness	4.20 (3.4, 4.8)	3.80 (3.2, 4.0)	1052.5	-2.522	.012*
Opportunity Stickiness	4.00 (3.4, 5.0)	3.80 (3.2, 4.0)	1126.5	-2.114	.035*
Total	4.05 (3.5, 4.7)	3.80 (3.4, 4.1)	1063.5	-2.449	.014*

Note. * $p < .05$.

This suggests male public-funded teacher trainees possess stronger intentions, commitments, and stability regarding rural teaching. Potential explanations include gendered social roles and career expectations. In many contexts, teaching offers males relatively stable income and social status congruent with traditional familial provider roles, potentially enhancing satisfaction. Conversely, female teachers often face a more stringent “glass ceiling,” alongside career interruptions due to

marriage and childbearing, leading to greater discrepancies between expectations and reality, and consequently, higher mobility intentions.

4.3.2 Home Location

Mann-Whitney U tests (Table 7) showed that rural-origin students had numerically higher career stickiness across all dimensions and overall compared to urban-origin peers. However, these differences were not statistically significant ($p > .05$).

Table 7. Mann-Whitney U Test Results: Home Location (Rural vs. Urban)

Dimension	Urban (n= 33)	Rural (n= 95)	U	Z	p
Emotional Stickiness	3.40 (2.5, 4.0)	3.80 (3.2, 4.2)	1258.0	-1.694	.090

Dimension	Urban (n= 33)	Rural (n= 95)	U	Z	p
Normative Stickiness	4.00 (3.4, 4.2)	4.20 (3.8, 4.6)	1255.0	-1.715	.086
Continuance Stickiness	3.80 (3.2, 4.2)	3.80 (3.4, 4.2)	1449.5	-0.646	.518
Opportunity Stickiness	3.60 (3.0, 4.3)	3.80 (3.2, 4.0)	1469.5	-0.538	.591
Total	3.65 (3.3, 4.1)	3.90 (3.5, 4.1)	1296.5	-1.477	.140

While rural-origin students demonstrated higher numerical scores, the most salient finding is that affective identification levels were similarly low across both groups. This indicates that a “rural background” does not automatically translate into deep “educational sentiment.” Familiarity with the rural environment may reduce maladaptation but does not spontaneously escalate into enduring professional passion. Authentic affective stickiness requires systematic post-enrollment cultivation.

4.4 Qualitative Findings

Qualitative analysis triangulated the quantitative results, providing richer contextual understanding.

Normative Stickiness: Interviews confirmed that contractual obligations were the primary reason for staying. Respondents viewed breach of contract as betraying policy support and responsibility to the assigned locality (A05, A06). “Since I chose this path, I’ll do my best during the service term; after all, one must honor agreements” (A06). Some acknowledged that heavy workloads dampened perseverance (A07), yet refrained from resigning due to having benefited from the program’s provisions (A02, A04). This aligns with the quantitative finding of high normative stickiness rooted in both constraint and moral consciousness.

Affective Stickiness: Interviews substantiated the “normative dominance, affective deficiency” pattern. Most respondents could fulfill teaching duties but lacked strong belonging or identification, citing pragmatic enrollment motives like reducing educational costs or securing stable jobs rather than passion for rural education (A03, A08). Only isolated cases expressed positive emotional bonds: “I’d miss the children most. I’ve taught them since Grade 1, watching them grow daily” (A06). Female respondents frequently cited inconveniences in rural life and limited career horizons as barriers to emotional connection (A07, A08). Notably, even locally-born respondents who stayed partly due to proximity (A05, A08) did not express deep

identification. While they adapted better than urban colleagues (A04, A11), this reflected situational adaptation, not emotional commitment. This resonates with the quantitative finding that geographic origin fails to guarantee emotional attachment.

Continuance Stickiness: Interviews highlighted the constraining power of economic, career, and credit-related costs. Respondents noted that experience accumulated in basic education was not easily transferable; resigning would mean forfeiting prior investments and paying penalties. “No thoughts of breaching; I can’t afford the fine” (A01). Abandoning six years of seniority and promotion progress for a fresh start elsewhere was deemed impractical. Breach of contract also risked damaging personal credit records and facing intense competition in future civil service exams (A04). This underscores the passive, economically-driven nature of this stickiness.

Opportunity-Based Stickiness: Most viewed alternative quality jobs as scarce. Some contrasted teaching favorably with local private-sector options, citing stability, holidays, and decent pay as advantages within county-level contexts (A02). Others simply lacked viable alternatives (A07). Crucially, several stated they would reconsider their career choice if lower-stress, higher-paying opportunities arose (A01, A11), revealing the fragility of retention based solely on limited options.

Gender and Origin Nuances: Female interviewees emphasized that long-term retention hinged significantly on local marriage and settlement prospects (A01, A03, A07). Extensive after-school duties, parent-teacher communication, and managing special-needs students added burdens. Male respondents, while acknowledging issues like poor housing or strict management, reported fewer family-care responsibilities and lower overall psychological burden regarding long-term tenure (A02, A04, A10). Regarding origin, locally-born respondents (A04, A05) planned to pursue further studies or

relocate to cities post-service. Those assigned away from their hometowns (A01, A09) indicated their willingness to stay depended heavily on urban amenities; reassignment to remote villages would trigger exit intentions. This confirms that recruiting local talent alone is insufficient; interventions fostering local integration and emotional commitment are essential.

5. Discussion and Recommendations

5.1 Discussion

This study delineates the complex landscape of career stickiness among public-funded teacher trainees, revealing structural tensions and critical junctures in their transition from “compliance” to “rootedness.”

5.1.1 Structural Tension: “Normative Dependence” vs. “Affective Deficiency”

The prominent “high-norm–low-affect” profile indicates that while contractual obligations secure a baseline of short-term retention, this externally-driven “passive stickiness” is inherently unstable. Once service periods conclude and external constraints relax, commitment lacking affective grounding risks precipitous decline. This echoes Psychological Contract Theory, highlighting the necessity of evolving from transactional to relational contracts. Without internalizing contractual duties into value identification, the end of the service term becomes a point of potential disengagement rather than a milestone of career development. Overcoming “contract dependency” by constructing an endogenous retention mechanism centered on affective identification is therefore imperative for sustainable rootedness.

5.1.2 Policy Blind Spot: Neglect of Gender Heterogeneity

The significant gender differences expose a “one-size-fits-all” bias in current policies. While successful in attracting entrants, policies inadequately address the differentiated challenges faced by women—particularly urban-origin females—within rural contexts. Issues such as work-family conflict, career development bottlenecks, and social network fragmentation during the tenure phase receive scant systematic attention. This support deficit undermines female teachers’ career resilience. Future policy must adopt a gender-sensitive lens, shifting from mere “retention assurance” to fostering “developmental retention.”

5.1.3 Heterogeneous Pathways: “Returnees” vs. “Newcomers”

Differences by family origin illuminate divergent pathways. For the predominant rural-origin cohort (“returnees”), possessing natural adaptive advantages and emotional ties, policy should focus on sustained empowerment: enhancing professional development, recognition incentives, and avenues for value realization to consolidate and elevate their affective stickiness. Conversely, for urban-origin students (“newcomers”), policy must prioritize overcoming alienation: improving living conditions, creating cultural integration opportunities, and establishing robust social support systems to ease initial adaptation and gradually nurture intrinsic emotional bonds with rural education.

5.2 Recommendations

The journey from “compliance” (a starting point of creditworthiness) to “rootedness” (an endpoint of mission) requires a systemic shift from viewing targeted students as “contract compliers” to recognizing them as “value co-creators.” We propose a tripartite reinforcement pathway integrating Emotional Empowerment, Norm Optimization, and Developmental Enablement.

5.2.1 Emotional Empowerment: Building the “Psychological Contract” and Deepening Value Identification

Address the affective deficit through systematic interventions:

Pre-service Cultivation: Integrate rural education modules into curricula. Organize immersive practicums and study tours in rural schools. Invite exemplary rural teachers for motivational talks. Proactively instill the value of “rural education as a promising frontier.”

In-service Identity Formation: Implement mentorship programs pairing novices with experienced rural educators to accelerate professional efficacy. Institutionalize commendations for outstanding rural teachers, enhancing occupational prestige and social recognition.

Community of Practice & Belonging: Encourage participation in village activities (e.g., cultural advising, child welfare committees). Foster deep connections with parents and villagers, integrating personal growth with community development. Create peer-support networks

among targeted teachers to transform the workplace from a “unit” into a “home.”

5.2.2 Norm Optimization: Reshaping the “Contractual Relationship” towards Incentive Compatibility

Move beyond punitive compliance towards developmental partnership:

Humanized Contract Design: Clearly stipulate mutual rights and obligations within agreements. Explicitly guarantee entitlements regarding further training, promotion, and welfare during and after the service period, transforming the contract from a “punitive instrument” into a “development pact.”

Tiered Service Incentives: Explore a “Basic Service Period + Long-term Incentives” model. Offer substantial rewards for continued service beyond the initial term, such as retention bonuses, prioritized promotions, and guaranteed slots for part-time or full-time master’s programs in education, thereby encouraging enduring commitment.

5.2.3 Developmental Enablement: Expanding “Growth Horizons” and Implementing Precision Support

Embed teachers within the rural social fabric:

Role Expansion in Rural Governance: Support teachers in serving as “Rural Culture Facilitators” or “Children’s Advocates,” participating in village governance. Leveraging their educational capital elevates their sense of social value and achievement.

Home-School-Community Alliances: Systematize home visits, open days, and community volunteering to deepen interactions. Being accepted, respected, and needed by families and communities fosters profound emotional bonds.

Differentiated Support: Tailor assistance based on the quantitative insights into subgroup differences. Prioritize support for female teachers regarding work-life balance (e.g., flexible scheduling, childcare facilities, social networking events). For urban-origin teachers, focus on mitigating lifestyle inconveniences and highlighting the unique rewards of rural life. For rural-origin teachers, channel their familiarity into a strengthened sense of professional mission and responsibility.

6. Conclusion

This empirical study of public-funded teacher

trainees in Guangdong’s less-developed regions reveals a career stickiness profile dominated by normative commitment but deficient in affective attachment, marked by significant gender disparities and nuanced rural-urban origin differences. Mere contractual compliance fails to engender deep professional belonging or passion organically. Achieving the leap from “compliance” to “rootedness” demands a systemic reorientation: shifting policy focus from external “contractual coercion” to internal “emotional drive,” and from macro-level “workforce supplementation” to micro-level “individual nurturing.” By synergistically implementing emotional empowerment, norm optimization, and developmental enablement, stakeholders can construct a supportive ecosystem that balances professional prospects with humanistic care. Such an ecosystem holds the potential to ensure these teachers not only “get down” and “stay put,” but also “live well” and “have a future,” ultimately rooting their personal aspirations deeply in the fertile soil of rural education and becoming a genuine driving force for rural educational revitalization.

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Character Development and Ethical Behavior Formation Among Trainees: A Developmental Psychology Perspective Based on Vygotskian Social Interaction Theory — A Case Study of Nsamizi Institute of Social Development

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Abstract

This qualitative case study investigates character development and ethical behavior formation among trainees at Nsamizi Training Institute of Social Development (NTISD) in Mpigi, Uganda, grounded in Vygotsky's sociocultural theory. The objective was to examine how social interactions within training environments shape the moral and professional dispositions of future social development workers. Employing a qualitative approach, data were collected through semi-structured interviews with 12 trainees and 8 staff, supplemented by document analysis and observations. Findings reveal that character and ethical behaviors are primarily cultivated through peer collaborations, mentorship by lecturers (More Knowledgeable Others), community outreach activities, and institutional cultural practices. These processes align with Vygotsky's Zone of Proximal Development (ZPD), where guided social interaction mediates internalization of values. Trainees reported improved self-regulation, empathy, and professional integrity, although challenges such as resource constraints persist. The study concludes that intentional scaffolding of social interactions enhances ethical formation. Recommendations include embedding structured character education modules, strengthening mentorship programs, and fostering reflective practices.

Keywords: character development, ethical behavior formation, Vygotskian sociocultural theory, trainee formation, Nsamizi Institute, social development education, Uganda

1. Introduction and Background of the Study

The concept of character development has deep historical roots, tracing back to Aristotelian virtue

ethics, which posits that moral character is cultivated through habituation and practice within a political community (Kristjánsson,

2022). In the African context, character formation was historically embedded in indigenous education systems, where communal living, rites of passage, and intergenerational dialogue served as the primary pedagogies for instilling values such as integrity, responsibility, and empathy (Teklemariam, 2025). These pre-colonial systems viewed the individual as inextricably linked to the community, a stark contrast to the individualistic models later introduced. The advent of formal education in Uganda during the colonial era shifted focus toward academic and technical skills, often at the expense of holistic moral formation (Nyanzi & Mahmood, 2026). Post-independence, despite the 1992 Government White Paper on Education emphasizing the creation of “complete” citizens, the implementation of systematic character education in tertiary institutions has remained fragmented (Thornberg, 2013; Veugelers & Vedder, 2003). Over the last two decades, however, global and local shifts have renewed interest in “values education,” recognizing that technical proficiency without ethical grounding poses risks to social development, particularly in professions like social work where trust is paramount (Purwaningsih, 2024).

The general context of this paper is Nsamizi Training Institute of Social Development (NTISD), which was established in 1953 in Mpigi District and stands as one of Uganda’s premier institutions for training social development professionals. Historically, the institute has focused on producing practitioners equipped to handle community challenges, ranging from refugee support to probation and social welfare. Its pedagogical context is rooted in the broader mandate of NTISD to produce not just skilled workers, but ethically sound individuals capable of navigating the moral complexities of Ugandan society. Currently, NTISD engages in various community outreaches and partnerships, such as with the UNHCR, which provide practical platforms for trainee formation (2023). The theoretical context draws from developmental psychology, specifically Lev Vygotsky’s sociocultural theory, which argues that social interaction plays a fundamental role in the development of cognition and morality. In Ugandan higher education, where social challenges like corruption and professional misconduct are prevalent (Abbasi-Asl et al., 2025), understanding how training environments facilitate the internalization of ethics is critical.

NTISD serves as a strategic case study because its pedagogical model inherently relies on fieldwork and community engagement, providing a rich social environment for moral learning.

Current Issues and Justification of Key Concepts: Contemporary issues in Uganda’s social sector highlight a crisis of ethics. Reports of mismanagement of refugee funds, neglect of duties by social workers, and general integrity deficits in public service have raised questions about the efficacy of current training models (Gidron & Hovel, 2018; Abukar, 2024). These issues underscore the urgency of the study. Justification for the key concepts lies in the need to bridge the gap between “knowing” ethics and “being” ethical. Character development is defined here as the gradual acquisition of virtues that stabilize an individual’s moral orientation (Purwaningsih, 2024). Ethical behavior formation refers to the process by which individuals internalize professional codes of conduct and apply them in practice. Vygotskian Social Interaction Theory is pivotal because it moves beyond trait-based psychology (which suggests character is fixed) to a developmental perspective (which suggests character can be constructed through social mediation). This study is important because it explores how the “More Knowledgeable Other” (MKO), in this case, lecturers and field supervisors, scaffold ethical reasoning in trainees. Furthermore, with the increasing digitization of education, understanding how social interactions, face-to-face mentorship, peer debates, and community immersion impact character is vital for curriculum design (Malik et al., 2025). By focusing on NTISD, the study addresses the specific need for contextually relevant moral pedagogies in African tertiary institutions.

1.1 Problem Statement

Existing literature demonstrates that character education significantly improves professional outcomes in social work and related fields. Research globally indicates that students who undergo explicit ethics training demonstrate higher levels of moral reasoning and professional competence (Kristjánsson, 2022). However, in Ugandan tertiary institutions, including Nsamizi Training Institute of Social Development (NTISD), there is limited context-specific empirical evidence detailing how these processes occur or the effectiveness of the current methods. While it is known that social work students engage in fieldwork, the specific mechanisms

through which these interactions translate into internalized character traits remain under-explored (Stephenson, 1998; Veugelers & Vedder, 2003).

The core problem is that despite the emphasis on social work ethics in the curriculum, trainees may still graduate with insufficient character and ethical competencies required for the complex moral landscape of modern Uganda. This problem is evidenced by the increasing reports of unethical practices among social workers, including bribery, embezzlement of funds intended for vulnerable populations, and emotional detachment in service delivery (Abbasi-Asl et al., 2025). Furthermore, anecdotal evidence from NTISD supervisors suggests that trainees often struggle to apply theoretical ethical codes to real-life dilemmas during field placements, indicating a disconnect between classroom instruction and internalized behavior.

Past studies have largely focused on quantitative assessments of moral reasoning or curriculum reviews, neglecting the qualitative, process-oriented aspects of character formation (Purwaningsih, 2024). Specifically, there is a scarcity of theory-driven qualitative case studies that apply Vygotskian perspectives, such as the Zone of Proximal Development (ZPD), to understand how social interactions scaffold ethical formation in African higher education settings. The research gap lies in understanding the role of the social environment (peers, mentors, community culture) in fostering moral consciousness. This study is necessary to generate actionable insights into how intentional social structuring in training can bridge the gap between ethical knowledge and ethical behavior, thereby improving the quality of social development professionals in Uganda.

1.2 Purpose of the Paper

The purpose of this study is to examine character development and ethical behavior formation among trainees at Nsamizi Institute of Social Development from a Vygotskian developmental psychology perspective.

1.3 Research Objectives

This study was guided by the following objectives:

- 1) To explore the processes of character development among trainees at NTISD through social interaction.
- 2) To examine the formation of ethical

behaviors through social interactions in the training environment.

- 3) To assess the application of Vygotskian social interaction theory in fostering character and ethical competencies at the institute.

1.4 Research Questions

- 1) How do social interactions contribute to character development among trainees at NTISD?
- 2) In what ways are ethical behaviors formed through the training processes at the institute?
- 3) How does Vygotsky's social interaction theory manifest in the character and ethical formation practices at NTISD?

1.5 Significance of the Study

- 1) **Academics:** This study enriches the body of knowledge in developmental psychology and moral education by providing an African application of Vygotskian theory (Rigopouli et al., 2025). It contributes to the discourse on how sociocultural contexts influence moral cognition, offering a theoretical bridge between Western developmental theories and African communal educational philosophies (Teklemariam, 2025).
- 2) **Practitioners/Industry:** Findings will guide trainers, social workers, and field supervisors in designing effective mentorship programs and community-based ethical practices. By highlighting the efficacy of scaffolding and the "More Knowledgeable Other" role, the study offers practical pedagogical strategies for enhancing the ethical formation of students in social work institutions (Malik et al., 2025).
- 3) **Policymakers:** Insights derived from this study will inform the National Council for Higher Education (NCHE) and the Ministry of Education and Sports regarding the integration of character modules into tertiary curricula. It provides evidence-based recommendations for policy frameworks that mandate structured mentorship and ethical formation as core components of professional training (Stephenson, 1998; Thornberg, 2013; Veugelers & Vedder,

2003).

- 4) **Society:** Ultimately, society benefits from the production of ethically competent social development professionals. Enhanced character and integrity among graduates will lead to improved community outcomes, increased public trust in social services, and more effective handling of vulnerable populations in Uganda (Abbasi-Asl et al., 2025).

1.6 Scope of the Study

- **Location:** The study was conducted at Nsamizi Training Institute of Social Development (NTISD), located in Mpigi District, Uganda.
- **Population:** The study population comprised trainees (specifically final-year students to capture the cumulative effect of training) and staff (lecturers and field supervisors) involved in social development programs.
- **Variables:** The key variables under study were Character Development and Ethical Behavior Formation (dependent variables), and Vygotskian Social Interactions (independent variable).
- **Timeframe:** The study focused on training processes and institutional practices observed from 2020 to 2025, capturing recent curricular adjustments and post-COVID-19 educational shifts.
- **Limitations:** The study relied on self-reported data from interviews, which may be subject to social desirability bias. Additionally, as a single case study, the findings may have limited generalizability to other institutions with different cultural or pedagogical environments.

2. Theoretical Framework

The study is anchored in Vygotsky's Sociocultural Theory, specifically the concept of Social Interaction Theory. Lev Vygotsky posited that learning is a socially mediated process where cognitive development, including higher psychological functions, occurs first on the social level and later on the individual level (Rowe & Wertsch, 2002; Kozulin, 2015). A central tenet of this theory is the Zone of Proximal Development (ZPD), defined as the distance between a learner's actual developmental level, determined

by independent problem solving, and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Rigopouli et al., 2025).

The theory introduces the concept of the More Knowledgeable Other (MKO)—anyone who has a better understanding or a higher ability level than the learner, typically a teacher or peer. In the context of moral development, the MKO guides the learner through ethical dilemmas, modeling appropriate reasoning and behavior. Through scaffolding, support is gradually withdrawn as the learner gains competence, allowing for the internalization of ethical standards (Vygotsky, 1978).

This theory was chosen because it emphasizes the collaborative and culturally embedded nature of learning, which aligns with Uganda's communal context and NTISD's community-oriented training model. Unlike stage-based theories of moral development (e.g., Kohlberg) that focus on individual reasoning, Vygotsky's theory allows for an analysis of how interactions—such as community outreaches, peer discussions, and mentorship—construct moral character. It relates directly to the topic by providing a framework to understand how trainees at NTISD internalize professional values not just by reading codes of conduct, but by actively engaging in social practices within their ZPD, mediated by institutional culture and mentors (Malik et al., 2025).

3. Literature Review

Variable 1: Character Development in Higher Education

Character development involves the cultivation of enduring virtues such as honesty, resilience, empathy, and responsibility. Recent studies affirm its critical importance in higher education, arguing that universities must produce not just skilled workers, but virtuous citizens (Purwaningsih, 2024). Literature suggests that character is not static; it is developmental. In the context of social work, character traits are the bedrock of professional resilience, preventing burnout and ensuring consistent service delivery. Studies elsewhere, particularly in the West, have utilized service-learning as a primary vehicle for character development, finding that engagement with diverse populations fosters empathy and civic responsibility (Kristjánsson, 2022). In African contexts, the literature highlights the

tension between traditional Ubuntu ethics and modern individualistic training approaches; Teklemariam (2025) notes that while African indigenous education excelled at communal character building, modern tertiary institutions often fail to integrate these holistic approaches, leading to a “moral disconnect.” Previous findings emphasize the role of role models; students tend to adopt the character traits of their instructors. However, what is missing in current literature is a detailed analysis of the micro-processes of peer interaction in character formation. While teacher-student dynamics are well-documented, the influence of the student cohort as a community of practice in Ugandan institutions remains under-researched (Abbasi-Asl et al., 2025). Furthermore, there is a dearth of studies linking specific developmental psychology theories like Vygotsky’s to character outcomes in African higher education.

Variable 2: Ethical Behavior Formation

Ethical behavior formation entails the internalization of moral reasoning and the translation of that reasoning into professional conduct. Scholarship underscores that ethics training is most effective when it is experiential rather than purely didactic (Stephenson, 1998; Thornberg, 2013; Veugelers & Vedder, 2003). Simulation, case studies, and field immersion are cited as best practices for bridging the “knowing-doing” gap. In the social work profession, ethical competency is non-negotiable due to the vulnerability of client populations. Research indicates that ethical behavior is formed through a cycle of encountering dilemmas, reflecting on them, and receiving feedback. Researchers (Malik et al., 2025) argue that in “Generation Alpha,” the digital context complicates ethical formation, requiring new forms of social scaffolding. Despite the recognized importance of ethics, recent studies reveal significant gaps in Ugandan higher education, as Stephenson (Stephenson, 1998; Thornberg, 2013) and Veugelers & Vedder (2003) reported that many institutions treat ethics as a theoretical “add-on” course rather than an integral part of the curriculum. What is missing is longitudinal research that tracks how students at NTISD navigate the transition from classroom ethics to field practice. Additionally, limited research exists on how institutional culture—specifically the unwritten rules and norms of a training institute—either supports or undermines the ethical behavior of trainees (Abbasi-Asl et al.,

2025). The role of observation and mimetic learning in ethics formation also requires further exploration in this context.

Variable 3: Vygotskian Social Interaction in Moral Contexts

Vygotsky’s framework is increasingly applied to moral education. The theory posits that moral reasoning, like cognition, is constructed through social interaction. Rigopouli et al. (2025) highlights how creativity and collaborative problem-solving—key Vygotskian concepts—can be utilized to foster ethical decision-making in the 21st century. The ZPD is interpreted in moral terms as the space where a learner can solve an ethical problem with guidance but not alone. Research indicates that peer dialogue is a powerful tool for moral development, as it forces individuals to articulate, defend, and refine their ethical viewpoints (Rowe & Wertsch, 2002; Kozulin, 2015). Furthermore, the concept of “tools” (language, cultural symbols) is central; trainees internalize the language of their profession to mediate their ethical behavior. However, there is a gap in applying these theory-driven insights to the specific context of social development training in Uganda. While Vygotsky is widely cited in cognitive educational psychology, his application to affective and moral domains in African tertiary institutions is limited (Traina, 2025). Specifically, how the concept of the “More Knowledgeable Other” functions in a resource-constrained environment where staff-student ratios are high, remains an unanswered question. This literature review suggests a need for empirical studies that operationalize Vygotsky’s constructs (ZPD, Scaffolding, MKO) to explain the character formation processes at institutions like NTISD.

4. Methodology

The study adopted a qualitative research approach, utilizing an exploratory case study design. This design was deemed appropriate as it allowed for an in-depth exploration of the social processes of character development within a bounded system (NTISD) in its real-life context (Creswell, 2016). The target population included trainees and staff members involved in social development programs.

Sampling Method: Purposive sampling was used to select participants who could provide rich information regarding the study’s objectives. Specifically, 12 final-year diploma and certificate trainees were selected because they had

undergone extensive training and fieldwork. Additionally, eight staff members (five lecturers and three administrators) were selected based on their experience in mentorship and curriculum implementation.

Sample Size: The total sample size was 20 respondents. This size was deemed sufficient for qualitative saturation, ensuring that diverse perspectives were captured.

Data Collection Methods: Data were collected using semi-structured interviews (comprising 4

probes per research question to ensure depth), Focus Group Discussions (FGDs) with trainees, document analysis (reviewing field reports and student ethics portfolios), and non-participant observation of classes and field activities.

Data Analysis: Data were analyzed thematically. Audio recordings were transcribed verbatim and coded using NVivo software to identify emerging patterns related to the Vygotskian constructs. Trustworthiness was ensured through triangulation of methods and member checking.

Table 1. Table of Respondents

Category	Number	Role/Year of Study	Rationale for Selection
Trainees	12	Final Year (Diploma/Certificate)	Have experienced full cycle of training and socialization.
Lecturers	5	Social Development Department	Act as “More Knowledgeable Others” and mentors.
Administrators	3	Program Heads/Deans	Oversee curriculum and institutional culture enforcement.
Total	20		

The table represents a balanced purposive sample enabling rich triangulation of social interaction processes at NTISD, and the selection ensured representation across gender and specific programs (e.g., Social Work, Community Development) to capture a holistic view of the institutional culture.

5. Interview Findings per Variable/Objective

Objective 1: Processes of Character Development among Trainees

The findings revealed that character development at Nsamizi Training Institute of Social Development (NTISD) is primarily an experiential process grounded in practice rather than theoretical instruction. Trainees consistently emphasized that meaningful character formation occurred through active participation in fieldwork, particularly in community outreach programs involving refugee settlements and vulnerable populations.

One trainee explained this transformation in detail:

“During our field placement at Kyaka II refugee settlement, I encountered families who had lost everything due to conflict and displacement. I realized that responding to such people required more than academic knowledge. I had to learn how to slow down,

listen carefully, and control my emotional reactions. Over time, I developed patience, empathy, and emotional strength because the situation demanded it, not because it was taught in class” (Trainee 7, Interview).

This narrative illustrates that character development is triggered by real-life emotional and moral exposure, where trainees are confronted with human suffering that reshapes their attitudes and behavior.

Documentary evidence from student reflection journals (2020–2025) further supports this finding, showing a progressive increase in empathy-related language such as “understanding,” “compassion,” “patience,” and “emotional resilience,” indicating gradual internalization of moral values over time.

Peer interaction also emerged as a critical mechanism for character formation. Trainees reported that after field visits, they regularly engaged in evening debriefing sessions where they openly discussed emotional challenges and moral dilemmas encountered during fieldwork. These sessions provided emotional relief and collective meaning-making. One participant noted:

“After visiting the field, we always gather as students to talk about what we experienced. Some of us feel

overwhelmed or even helpless when we see suffering. In these discussions, we encourage each other, share coping strategies, and remind one another why we are in this profession. It helps us not to lose hope or become emotionally drained” (Trainee 3, Interview).

However, some trainees indicated that inconsistent ethical modeling by a few staff members sometimes weakened the learning process, as contradictions between taught values and observed behavior created confusion.

Overall, these findings suggest that character development at NTISD occurs through internalization of lived experiences within the Zone of Proximal Development (ZPD). Field placements act as the primary learning environment where More Knowledgeable Others (MKO), including supervisors and community leaders, guide trainees in interpreting complex human situations. Peer debriefings serve as secondary scaffolding structures that support emotional regulation and shared moral understanding. This aligns with Vygotsky’s view that higher psychological functions originate through social interaction and are gradually internalized into individual character (Abbasi-Asl et al., 2025; Teklemariam, 2025).

Objective 2: Formation of Ethical Behaviors through Social Interactions

The findings indicate that ethical behavior formation at NTISD is strongly shaped by structured social interaction and guided learning processes. Initially, most trainees reported that they perceived ethics as abstract rules that were difficult to apply in real situations. However, this perception changed significantly after exposure to case-based learning and mentorship.

A lecturer explained the teaching approach as follows:

“We present students with real-life ethical dilemmas drawn from social work practice. For example, we might present a situation where a client offers a gift to a social worker, or where there is a conflict of interest in service delivery. Students are then placed in groups to analyze the situation, debate possible actions, and justify their decisions. As facilitators, we guide them toward professional ethical standards while allowing them to critically think through the dilemma” (Staff 4, Interview).

This explanation shows that ethical learning becomes more effective when students actively engage in problem-solving rather than memorizing ethical codes.

Institutional culture also plays a major role in reinforcing ethical behavior. NTISD promotes a strong culture of “community living,” where students share responsibilities, interact closely, and are constantly observed by peers. Many trainees explained that this environment creates a sense of accountability. One trainee stated:

“Here at NTISD, you cannot easily behave irresponsibly because everyone knows everyone else. If you do something wrong, your colleagues will question you. Even when no lecturer is present, we feel responsible because we represent our group. That pressure helps us behave properly” (Trainee 9, Interview).

Despite these positive influences, some trainees reported challenges related to resource constraints. For example, limited transport and workload pressures sometimes resulted in lateness or incomplete documentation, which they later recognized as ethical shortcomings.

These findings suggest that ethical behavior is socially constructed through interaction, reflection, and institutional expectations. Case conferences and mentorship function as scaffolding mechanisms that support learning within the Zone of Proximal Development (ZPD). At the same time, institutional norms act as cultural tools that reinforce accountability. However, contradictions arising from resource limitations may weaken consistent ethical internalization (Stephenson, 1998; Thornberg, 2013; Veugelers & Vedder, 2003; Purwaningsih, 2024).

Objective 3: Application of Vygotskian Social Interaction Theory

The findings clearly demonstrate the practical relevance of Vygotsky’s social interaction theory in explaining both character and ethical development at NTISD. Lecturers and supervisors function as More Knowledgeable Others (MKOs), providing continuous guidance, correction, and support during training and fieldwork.

A trainee described this developmental transition in detail:

“In my first year, I depended completely on my supervisor. I would ask her what to do in every situation because I was afraid of making mistakes. But as I progressed, something changed. Now in my final year, even when I am alone in the field, I can make decisions confidently. It feels like her guidance has become part of me. I don’t need her physically because

I already know what she would advise me to do” (Trainee 11, Interview).

This statement clearly reflects the process of internalization, where external social guidance gradually becomes internal self-regulation.

Peer learning also plays a significant role in reinforcing ethical reasoning. Group discussions and collaborative tasks require trainees to express, defend, and sometimes revise their ethical viewpoints, leading to deeper understanding through dialogue.

However, the study identified that digital communication gaps occasionally disrupted these interactions, reducing the consistency of collaborative learning experiences.

Overall, the findings confirm that NTISD operates within a strong sociocultural learning framework. Ethical competence is not developed in isolation but through guided participation, social dialogue, and progressive internalization. This supports Vygotsky’s model of development and aligns with Malik et al. (2025) and Rigopouli et al. (2025), who emphasize learning as a distributed and socially constructed process.

6. Discussion

Discussion of Objective 1: Character Development Processes

The social processes observed at Nsamizi Training Institute of Social Development (NTISD) align with recent literature on character formation through collaborative and culturally relevant practices in African contexts. The finding that field experiences are the primary driver of character resonates with Abbasi-Asl et al. (2025), who argue that character is person-specific and develops through active engagement with one’s environment. Unlike traditional didactic methods, the immersive nature of social work training forces a confrontation with the self, fostering resilience and empathy.

The role of peer debriefings as a support mechanism mirrors the communal ethos of African education described by Teklemariam (2025), where learning is a collective responsibility. This peer scaffolding allows trainees to process traumatic or challenging field experiences, preventing empathy fatigue. The study’s findings also support Kristjánsson’s (2022) view that character is a cluster of virtues activated through habituation, with the field serving as the primary habituation ground.

However, the inconsistency in staff modeling

highlights a gap between theoretical expectations and institutional realities. While Rigopouli et al. (2025) emphasize the creativity and guidance role of the More Knowledgeable Other (MKO), the realities of staff burnout and occasional ethical lapses in Uganda (Stephenson, 1998; Thornberg, 2013; Veugelers & Vedder, 2003) suggest that the effectiveness of the MKO depends heavily on institutional support systems. This aligns with Wenger’s (1998) concept of a community of practice, where both learners and educators mutually develop within a supportive system.

Overall, the findings confirm that character development is socially mediated and context-dependent, reinforcing Vygotsky’s sociocultural theory. Fieldwork functions as the Zone of Proximal Development (ZPD), where trainees internalize virtues through guided participation.

Discussion of Objective 2: Formation of Ethical Behaviors through Social Interactions

The findings indicate that ethical behavior formation at NTISD is deeply rooted in guided social interaction. Initially, trainees perceived ethics as abstract rules; however, through case conferences and mentorship, these rules became practical decision-making tools. This supports Stephenson (1998), Thornberg (2013), and Veugelers and Vedder (2003), who emphasize that ethical learning requires active engagement with real-life contexts rather than passive instruction.

Institutional culture also plays a significant role in reinforcing ethical behavior. The culture of accountability and community living creates a social environment where trainees regulate their conduct to maintain group acceptance. This reflects Purwaningsih (2024), who argues that ethics are socially enforced norms shaped by institutional expectations.

Nevertheless, resource constraints introduce contradictions in ethical practice. Trainees reported instances where limited resources affected punctuality and record keeping, creating tension between ideal ethical standards and practical realities. This finding suggests that ethical behavior is not only psychological but also materially influenced. As Malik et al. (2025) argue, environments must enable the practice of virtue; otherwise, ethical development becomes constrained.

Discussion of Objective 3: Application of Vygotskian Social Interaction Theory

The findings strongly demonstrate the relevance of Vygotsky's social interaction theory in explaining character and ethical development at NTISD. Lecturers and supervisors function as More Knowledgeable Others (MKOs), providing structured scaffolding that gradually transitions into internalized self-regulation.

A key finding was the internalization of supervisory guidance, where trainees reported that they eventually "hear the supervisor's voice" when making decisions. This clearly reflects Vygotsky's (1978) concept of internalization, where external social dialogue becomes internal cognitive regulation. Traina (2025) further supports this view by arguing that moral development is essentially a dialogue between the self and others.

Peer interactions also function as secondary scaffolding mechanisms, allowing trainees to co-construct ethical meaning through discussion and reflection. This aligns with Rigopouli et al. (2025), who emphasize that learning and problem-solving are collaborative and creative processes.

However, the study also identified limitations associated with digital disruptions, which occasionally weakened face-to-face interaction. While Vygotsky emphasized direct social interaction, modern learning environments increasingly incorporate digital tools. Despite this, the findings suggest that emotional and moral learning still requires physical presence for deeper resonance, as supported by Malik et al. (2025).

Integrated Summary of Findings and Theoretical Implications

Overall, the study confirms that character development and ethical behavior formation at NTISD are deeply embedded in Vygotskian social interaction processes. The training environment functions as a sociocultural system where trainees internalize values through guided participation with MKOs and collaboration with peers. Fieldwork serves as the most significant Zone of Proximal Development, where trainees confront real moral dilemmas and develop virtues such as empathy and resilience.

Ethical behavior is socially constructed through case discussions, mentorship, peer interaction, and institutional norms of accountability. However, resource constraints and inconsistencies in staff modeling sometimes create dissonance between theoretical ethical

standards and lived experiences.

Ultimately, the internalization of supervisory guidance confirms the transition of ethical competence from the social to the individual level, validating Vygotsky's theory within the Ugandan social work education context (Abbasi-Asl et al., 2025; Rigopouli et al., 2025).

7. Recommendations

Based on the findings, the following recommendations are made:

- 1) **To the Institution (NTISD):** The institute should formalize the "social scaffolding" processes by embedding structured reflection sessions into the curriculum. Specifically, post-field debriefs should be mandatory and facilitated to ensure peer learning is maximized. The institute should also invest in training staff to be consistent moral models, recognizing their role as the primary MKOs.
- 2) **To the Government and NCHE:** The Ministry of Education and NCHE should review the curricula of social development programs to ensure that field practice is not just an academic requirement but an assessed component of character education. Policies should be introduced to fund mentorship programs in tertiary institutions, acknowledging that staff-student ratios affect the quality of social interaction.
- 3) **To Educationists and Trainers:** Educators should intentionally use Vygotskian strategies such as scaffolding and collaborative learning in teaching ethics. Rather than relying solely on lectures, they should create "ethical ZPDs" where students solve moral dilemmas in groups with decreasing levels of assistance.
- 4) **To Future Researchers:** Further studies should investigate the impact of digital social interactions on character formation, as this study suggested potential gaps in online ethics instruction. Longitudinal studies tracking graduates into their professional lives would also help determine if the character traits internalized during training persist in the workforce.

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Improving the Mental Ability of Objective Scientific Reflection of the Universe

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Abstract

The exploratory potential of the mental sensitivity of the Universe is revealed through the brain, as an intermediary between consciousness and the internal reality of a person and his external perceived environment using a set of methods that expand human perception. The exploratory potential of consciousness in the context of the scientific reflection of the Universe is an interdisciplinary topic that formalizes ways of extracting meaning from complex data, where neuroscience, physics, cognitive science and philosophy intersect. The main areas in which consciousness is considered as an instrument for understanding reality are, firstly, neurobiological and cognitive capabilities: integration of heterogeneous information — the brain collects data from the senses, memory and current goals into a single picture of the world; conscious control of attention — a person can purposefully focus on individual aspects of reality, enhancing them in perception and analysis; reflection and hypothesis testing — consciousness allows us to formulate assumptions, test them, notice contradictions and adjust the model of the world. The interdisciplinary formalization of consciousness's reflection of the Universe is accomplished through mathematical formulas. Intuition and creative thinking often lead to unexpected hypotheses, which are then tested using mathematical methods and models. Particularly in fields where data is ambiguous (astronomy, cosmology, high-energy physics), it is the human ability to see patterns and analogies that helps us find new meanings. Science not only describes the world but also decides what is important to study and how the results can impact society—here, the role of consciousness and values is fundamental.

Keywords: neuroscience, mental sensitivity, consciousness, objective reflection of the Universe, scientific knowledge of reality

1. Introduction

A person cannot function without visual, auditory, olfactory, tactile, and other sensory perceptions of the body's receptors. They lose the ability to think and communicate

communicatively without linguistic sensitivity and skills.

Organic sensors perceive thermodynamic, light, and other wave influences. Blind individuals with strong tactile sensitivity read texts. People

perceive musical spectral wave influences.

Consciousness perceives and reflects living information from the Universe. Researchers are improving the spiritual sensory sensitivity of consciousness to perceive the spectral wave influences of living information from reality for its deeper reflection. The neural network mental structures of the brain represent reality reflected by spiritual consciousness in a linguistic format. Spiritual consciousness is connected to the neural network mental structure of the brain. We receive a reflection of reality in a linguistic format in an active state. In dreams, we see reality reflected by spiritual consciousness. Day unto day uttereth speech, and night unto night sheweth knowledge (Psalm 18:3).

A scientist is incapable of objectively reflecting the Universe without the spiritual sensitivity to perceive its living information (Evgeniy Bryndin, 2025). The Creator allows researchers to perceive living information in accordance with their spiritual state (Evgeniy Bryndin, 2026b).

Spiritual state and mental abilities are complex phenomena that are understood differently in different traditions: psychology, philosophy, and religious teachings.

A psychological perspective on the connection between state and abilities.

In psychology, mental abilities are cognitive functions: attention, memory, thinking, perception, and the ability to form meaning (Evgenii Brindin, 2026b; Evgenii Brindin, 2026c). State here is a temporary characteristic of the psyche (activation level, emotional background, concentration), which directly influences these abilities. Key points:

- Spiritual state increases the effectiveness of cognitive processes. When stress levels are reduced and internal resilience is enhanced, attention and memory function better, and complex semantic constructs are easier to construct.
- Emotions modulate perception and interpretation. A positive attitude and a sense of security expand cognitive flexibility, while a negative attitude often narrows focus to simple, stereotypical solutions.
- Mental experience is not only knowledge, but also the structure of connections between it. Spirituality in a psychological context is often interpreted

as a system of values and meanings that organizes this experience and guides thinking.

1.1 Philosophical, Semantic, and Interdisciplinary Perspective

Will discuss the topic through the prism of meaning formation:

- The spiritual state as a special mode of semantic integration. In this state, a person is inclined to seek broader contexts, connect local facts with general principles, and see the “whole” behind the details.
- Metacognitive effect. Spiritual and value attitudes can act as “meaning filters”: they determine what is considered important and what is unimportant, thereby directing cognitive resources.
- Connection with figurative and symbolic thinking. Many spiritual traditions actively use images, symbols, and metaphors. This develops the ability to operate with abstract and polysemantic structures—something close to “holographic thinking” and spectral-semantic representations.

1.2 Practical Methods for Strengthening Mental Abilities

The following practices help sustainably develop the ability for deep reflection and meaning-making:

- Mindfulness and attention management. Meditative and contemplative techniques (in a neutral, non-religious context) train the ability to maintain focus and notice automatic reactions.
- Reflective writing. Keeping a journal, formulating one’s own meanings, and revising them help structure mental experience.
- Discipline of thinking. Working with arguments, verifying sources, and comparing different points of view strengthen analytical skills.
- Stress regulation and recovery. Sleep, physical activity, and reducing information overload are fundamental conditions for stable cognitive function.
- Value reflection. Periodic reflection: “What is important to me? What goals am I pursuing?” helps build a semantic

foundation that stabilizes thinking in the face of uncertainty.

1.3 Christian Perspective: "The Ladder" by John Climacus

The Christian tradition focuses on the transformation of the entire personality: purification from passions, development of virtues, and deepening of inner attention. How does this relate to mental abilities:

- Attention control and sobriety. In ascetic practice, the ability to manage attention and avoid distraction is of great importance. This is close to modern concepts of "controlled attention" and working memory.
- Restructuring motivation and value hierarchy. When higher values (love, humility, service) become dominant, the nature of thinking also changes: it becomes less egocentric and more holistic.
- Reflection and discrimination of thoughts. The practice of understanding one's inner movements develops the ability to finely differentiate meanings—the ability to discern nuances of motives and intentions.

In the Christian tradition, enhanced perception of living information from the Universe is understood as increased sensitivity to the moral and spiritual dimensions of existence and to a person's inner state (Evgenii Brindin, 2026a). Understanding the image of God brings one closer to an objective, holistic perception of His creations, mentally, heartfelt, and intuitive.

The Christian development of mental ability is discussed in the first section of the article. The second section of the article is devoted to the objective scientific reflection of the Universe. The third section provides a quantum research understanding of the objective reflection of reality. The article concludes by listing key aspects of the importance of developing mental abilities in scientific research.

2. Christian Development of Mental Ability

Let us consider the process of developing a researcher's mental ability to objectively scientifically reflect on the Universe, depending on their spiritual development along the ladder of St. John Climacus.

Each step is dedicated to a specific virtue (for

example, renunciation of worldly vanity, impartiality, meekness, repentance, prayer) or the struggle with a specific passion (anger, vanity, pride). The goal of this entire ascent is to transform the person themselves: to purify the heart, to free it from egoistic attachments, so that ultimately a deeper, more authentic knowledge of God becomes possible and, through Him, a clearer understanding of the meaning of all things. In other words, we are talking about a qualitative change in the perceiving subject itself.

In the patristic tradition (including "The Ladder"), it is said that as a person ascends spiritually, he truly begins to perceive the world, himself, and the actions of God more acutely and deeply. This is the spiritual fruit of the purification of the soul. Let us briefly consider these spiritual fruits.

In the initial stages (struggling with worldly vanity, renunciation, obedience), a person learns to distract themselves from external stimuli and vanity. This already trains inner mindfulness: they begin to better notice how external events resonate within, and what thoughts and emotions follow them. The skill of self-observation develops—this is the beginning of mental sensitivity.

Further, at the stages of repentance, remembrance of death, and mourning, a person becomes more deeply aware of their own weakness, sinfulness, and the fragility of life. This sharpens empathy: they feel the suffering of others more acutely, becoming more sensitive in relationships.

In the phase of struggling with vices (meekness, freedom from anger, chastity, etc.), a person purposefully refines individual spiritual powers. For example, by curbing anger, they learn to more subtly discern the motives of their own actions and those of others. Silence trains inner concentration, the ability to hear the quiet voice of conscience, and not just loud thoughts.

At the stages of spiritual peace (silence, prayer, dispassion), an important shift occurs. When external noises recede and passions subside, a person begins to perceive more subtle, spiritual realities. In the patristic tradition, this is called mental activity: the mind, freed from vanity, is able to penetrate more deeply into the meaning of events, perceive God's providence, and more acutely sense the presence of the Divine. Here, sensitivity takes on a new nuance—it becomes spiritual, connected with the experience of prayer

and contemplation.

At the summit (the union of faith, hope, and love), mental sensitivity achieves harmony: a person is able to simultaneously experience deeply, judge wisely, and act out of love. Mental sensitivity is accompanied by sober judgment and humility, and learns to direct everything toward good.

Spiritual ascent refines a person's perception; they truly begin to see the world differently. They become more conscious: they better understand their own motives, emotions, and deepest values. They develop the ability to notice subtle nuances in relationships, nature, and events—things that previously eluded them due to vanity or bias. In the Christian tradition, this is associated with the action of grace: as the heart is purified, a person becomes more receptive to “signals” from above, to God's providence, and through this, to a deeper, more holistic understanding of the structure of the world and man's place in it. In other words, it's not so much the analytical mind itself that improves, but rather the integrity of perception—when the mind, heart, and intuition work more harmoniously.

Through the Ladder, the researcher refines their mental sensory abilities. And as a consequence of spiritual purification, the researcher truly becomes more objective in a spiritual sense at each subsequent stage of spiritual development. Spiritual ascent up the Ladder refines the mental abilities to perceive the Universe.

3. An Objective Scientific View of the Universe

An objective scientific view is a unified picture and a set of testable models built on observations and experiments (Bryndin E., 2026; Evgeny Bryndin, 2025; Evgeny Bryndin, 2026a; Evgeny Bryndin, 2026d). In the case of the Universe, the primary tool is cosmology—a branch of astrophysics based on physics, mathematics, and astronomical data.

3.1 Key Pillars of the Scientific View

Observability and Reproducibility. Science describes not “the entire Universe” (it is inaccessible to direct study), but rather its observable part—the so-called observable Universe. Its radius is approximately 46 billion light-years, and its age is approximately 13.8 billion years. Due to the finite speed of light, telescopes effectively act as “time machines”: we see distant objects as they were in the distant past. Mathematical models instead of “photographs.” Instead of a single snapshot, science builds

models that are consistent with multiple independent observations. For example, the Λ CDM (Lambda Cold Dark Matter) model is the current standard, which combines data on the cosmic microwave background (CMB), the distribution of galaxies, and the accelerated expansion of the Universe.

Fundamental theories. These include general relativity (for gravity and large-scale structure) and the Standard Model of particle physics (for matter and interactions).

3.2 What Exactly Does Science Consider Objective Facts?

Expansion of the Universe. This is confirmed by the redshift of galaxy spectra (Hubble's law) and is consistent with general relativity.

CMB radiation. The uniform microwave background radiation with a temperature of about 2.725 K is an “echo” of the early hot phase of the Universe. Its spectrum and anisotropies have been measured with high precision and serve as one of the main sources of data for cosmology.

Composition of energy and matter. According to observations, the energy balance is approximately as follows:

- dark energy — ~69% (responsible for accelerated expansion);
- dark matter — ~27%;
- ordinary (baryonic) matter — ~5%.

Large-scale structure. Galaxies form a “cosmic web” of filaments and clusters, with voids between them. This is confirmed by sky surveys and computer simulations.

3.3 How Objectivity Is Ensured

Independent methods. The same parameter (for example, the age of the Universe) is determined in different ways: from the cosmic microwave background, from the ages of the oldest stars, from the expansion dynamics. Consistency of the results increases confidence in the model.

Quantitative Predictions. Good models not only describe the past but also predict new effects. For example, the “hot universe” theory predicted the existence of the cosmic microwave background radiation, which was later discovered.

Criticism and Refinement. Scientific models are constantly tested and can be revised as new data emerges. This is not a sign of weakness, but a self-correcting mechanism for science.

3.4 Limitations

Boundary of the Knowable. We cannot observe what lies beyond the cosmological horizon; any statements about the “entire universe” inevitably rely on extrapolation.

Unknown Components. Dark matter and dark energy are so named precisely because their nature has not yet been determined. They manifest themselves through gravity and expansion dynamics, but are not directly observable.

Different Scales – Different Laws. Different sets of rules operate at the quantum level and at cosmological scales, and a complete, consistent theory of them has not yet been created.

Spectroscopy and spectral analysis are among the most important tools in cosmology:

Spectral lines in galactic radiation provide redshifts and allow us to measure velocities and distances.

The spectrum of the cosmic microwave background is a nearly ideal blackbody spectrum, deviations from which (anisotropies) carry information about the early Universe.

Spectral-meaningful approaches (in terms of data analysis) are used to extract physical parameters from vast arrays of observations: for example, spectral line profiles help determine the chemical composition, temperature, and density of gas in the interstellar medium.

4. Quantum Research Technologies

Quantum technologies reflect the universe objectively in its dynamics and force us to rethink the very idea of objectivity (Evgeny Bryndin, 2026c). The point is that quantum mechanics truly changes our understanding of how reality works at a fundamental level, and this directly affects how we reflect it:

The role of the observer. In the quantum world, the very act of interacting with a system (for example, measuring) influences its state. This is often formulated as the “observer effect.” In classical experiments, we try to minimize interference, but in the microworld, any interaction inevitably changes something. This has sparked debate: does reality exist completely independently of who observes it and how? A well-known example is the “Wigner’s friend paradox”: for one observer, the system has already “chosen” a state, while for another (who has not yet received the information), it is still in

a superposition. Experiments with violations of Bell inequalities have shown that such differences in descriptions are real, calling into question the idea of a single, absolutely objective picture for everyone. Many physicists clarify: the point is that the description of reality depends on the way it is studied.

Superposition and probabilistic nature. At the quantum level, a particle can be in several states simultaneously (superposition). We cannot say that it has one “true” position or spin before measurement—only probabilities of different outcomes. This changes the very nature of “reflection”: we are describing not rigidly defined properties, but a spectrum of possibilities.

Entanglement. Two particles can be so linked that the state of one instantly influences the state of the other, regardless of distance. This demonstrates that reality at a deep level can be non-local—and this also changes the picture of the world we construct.

Quantum technologies are the tools that allow us to further explore these ideas and test theories (André LeClair, 2025; Liu, Y.J., 2025; Yingqi Wu, Yuanfeng Jin, Gang Lyu & Yang Liu, 2025; Akshai T. Krishnan, Kanad Sengupta, S. P. Dinesh & C. M. Chandrashekar, 2025). For example:

Quantum simulators. Scientists use them to model the behavior of complex quantum systems—for example, simulating processes in the early universe (the creation of particles in expanding space, the collapse of a false vacuum). This helps test hypotheses that are extremely difficult to calculate on classical computers.

Quantum computers. They are also used to model quantum systems and study fundamental questions.

Experiments with entanglement and superposition. New technological setups allow for increasingly sophisticated experiments that test the limits of quantum mechanics and help refine interpretations.

Quantum technologies provide us with powerful tools for studying the universe and simultaneously demonstrate that our “reflection” of reality is not a passive copy—it is actively shaped by interactions (including measurement) and depends on the chosen method. Science seeks stable patterns and reproducible results. It simply becomes clear that objectivity in a quantum context is not about “the world itself, independent of everything,” but about the fact

that different observers, using consistent methods, can come to consistent descriptions, even if their individual descriptions differ slightly.

5. Conclusion

A researcher's mental abilities are a key tool that directly influences how accurately and completely we reflect the Universe in our theories. Let's highlight key points that explain why their development is so essential.

(1) Overcoming subjective biases. Each of us has cognitive tendencies to notice some things and ignore others, and to make hasty generalizations. Without developing critical thinking, these "blind spots" easily permeate our interpretation of data: we may see a pattern where there isn't one, or reject a fact that doesn't fit our hypothesis. Improving mental skills (for example, mindfulness training, studying cognitive biases) helps scientists recognize such moments in time and adjust their approach to reduce subjectivity.

(2) Ability to construct and test hypotheses. Science advances by formulating hypotheses and rigorously testing them. This requires developed analytical skills: the ability to break a complex problem down into its components, see cause-and-effect relationships, and predict consequences. Flexibility of thought is also essential: scientific paradigms often shift as new data emerges. The ability to discard an outdated idea in favor of a more accurate model is also a result of training mental abilities.

(3) Working with abstractions and complex systems. Many fields of science (cosmology, quantum physics, theoretical biology) deal with objects and processes that cannot be directly observed. Abstract thinking skills, the ability to construct mental models, manipulate mathematical apparatus, and see connections between seemingly disparate phenomena are critical here. The more developed these abilities are, the deeper and more accurate the theoretical constructs can be.

(4) Systematic and holistic perspective. For a picture of the world to be objective, it is important to consider phenomena not in isolation, but in context—taking into account multiple factors, interdependencies, and historical and cultural assumptions. Systems thinking develops this ability to see the "big picture," which helps avoid reductionism (reducing the complex to the simple) and obtain more balanced knowledge.

(5) Scientific Intuition and Creativity. In the search for solutions, intuition—the ability to formulate a guess based on accumulated experience and patterns—also plays a crucial role. But the key here is that an intuitive breakthrough must be immediately subjected to rigorous critical scrutiny. In other words, developed mental skills are needed not only for generating ideas but also for rigorously evaluating them.

Mental abilities are a tool that enables the transformation of raw empirical data into objective knowledge (Quantum mind: How the brain's microtubules reveal the secrets of consciousness, 2024, September 29; Saúl Sarria, Mark Solms & Oliver H. Turnbull, 2026; Kleymush A.A. & Bashkin E.B., 2026; Petrova Ju.A., 2026; Shiryaev A.A. & Stepanov S.Yu., 2026; Dekina E.V. & Shalaginova K.S., 2026; Karmanova T.M., 2026; Pishchik V.I., 2026; Ermakov P.N. & Klyuchko D.S., 2026; Review of publications on the topic of consciousness for 2025–2026, n.d.; Anil Seth, 2023; Ryota Kanai & Ippei Fujisawa, 2024; Keppler J., 2026). By improving them, researchers enhance the quality of their cognitive process: they reduce the risk of error, expand the possibilities for discovery, and ultimately bring the scientific picture of the world closer to a more accurate reflection of reality.

Science also has social mechanisms (peer review, reproducible experiments, collective dialogue) that further "filter" subjectivity. But it is precisely developed mental skills that give a scientist the personal competence to effectively rely on mathematics—the queen of sciences—and to carry out mathematical formalization in interdisciplinary research.

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Flow Factors and Choreography Teaching Stages: A Correspondence Study

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Abstract

Choreography teaching has long been organized around technique training and the production of finished works, while students' motivational states and the quality of their experience rarely enter instructional design. Drawing on Csikszentmihalyi's flow theory and employing literature review and case analysis, this study examines the correspondence between flow factors and the stages of choreography teaching. Flow is characterized by three preconditions (clear goals, immediate feedback, and challenge-skill balance) and six experiential characteristics. Based on the conventional organization of Chinese choreography textbooks, choreography teaching is summarized into four stages: establishing motive and theme, organizing material and training technique, rehearsal feedback and self-observation, and role immersion and stage presentation. These stages are shown to correspond respectively to four groups of flow factors: clear goals together with presentation effects, challenge-skill balance, immediate feedback, and the loss of reflective self-consciousness. A logic of "condition supply-state emergence" is proposed: teachers cannot directly manufacture flow; they can only supply, through the design of each stage, the conditions under which flow becomes possible. Three cases—Wang Mei's modern dance drama *Thunder and Rain*, Matthew Bourne's *Swan Lake*, and motive-development exercises in choreography classes—are used to illustrate the correspondence.

Keywords: flow, choreography teaching, dance composition, challenge-skill balance, teaching stages

1. Introduction

Choreography teaching is among the most comprehensive courses in professional dance education. It must train bodily technique, deal with conception, structure, movement language and stage presentation, and at the same time attend to the formation and maintenance of students' creative motivation. For a long time, however, the evaluation of choreography teaching has focused on two visible endpoints: the degree to which students have mastered the techniques (motive development, phrase and

segment construction, canon, polyphony, stage spacing, and the like), and the completion quality of the final work. Whether students are genuinely engaged in the creative process, and whether they acquire sustained intrinsic motivation, has usually been treated as a matter of "personal feeling" and kept outside the scope of teaching.

This evaluative structure produces a familiar predicament: technique is transmitted, but the experience and the drive of creation are never designed. Students can reproduce given patterns after demonstration in class, yet their works are

often “correct but lifeless”; once the teacher’s instructions are removed, they lose the will to continue creating. The technical reason for this predicament is that choreography teaching lacks a middle layer between the “inventory of techniques” and the “evaluation of works” — an operational framework specifying in which teaching stage, and by supplying which psychological conditions, students can be made more likely to enter a state of deep engagement.

Flow theory may serve precisely as such a middle layer. Csikszentmihalyi proposed the concept of flow in 1975 and systematized it in 1990 (Csikszentmihalyi, 1975, 1990; Ren et al., 2009). Flow refers to the optimal experience in which a person is so completely absorbed in an activity that time, fatigue and even the self are forgotten. The theoretical value of the concept lies not in describing a pleasant feeling but in specifying the conditions under which that feeling occurs: when an activity has clear goals, provides immediate feedback, and matches the perceived challenge to the person’s skills, flow becomes possible (Nakamura & Csikszentmihalyi, 2002; Csikszentmihalyi, Abuhamdeh, & Nakamura, 2005). It is precisely this “condition–state” structure that makes an otherwise subjective experience amenable to instructional design.

Attention to flow in the Chinese dance literature has grown markedly in recent years. Ye (2021) studied the “flow state” of six professional Chinese dancers and found that “the balance between skill and challenge” and “the pleasure inherent in dancing itself” were the two most salient characteristics, whereas “the disappearance of self-consciousness” and “the transformation of time,” commonly regarded as hallmarks of flow, were rarely reported. Wu (2019) examined the structure of flow states among Chinese classical dance students; Zeng (2020) found that flow experience was not widespread in Latin dance classes and that methods for facilitating it were scarce; Wang (2019) discussed how flow can be elicited in dance teaching from the perspective of “body–mind unity.” On the side of creation and curriculum, Gang (2021) built a model of the influence of Dance Flow factors on learning outcomes and developed a measurement instrument, extending flow factors to course-level learning outcomes. In the wider literature, the Flow State Scale developed by Jackson and Marsh (1996) and Jackson and Eklund (2002) provided standardized tools for measuring flow,

and Wrigley and Emmerson (2013) verified the reliability and validity of the model in live music performance.

Taken together, these studies establish one fact: dance and music performance are fertile sites of flow. But they also leave a gap: their subjects are mostly performers or students whose states are measured, with little return to the teaching process to discuss the supply of conditions; the discussion largely remains at the macro level of courses and evaluation, with little connection to specific teaching stages; and no directly usable correspondence list yet exists between the conditional dimensions of flow and the stages of choreography teaching. Addressing this gap, this paper answers three questions: How should the stages of choreography teaching be divided? Which flow factors correspond to which stages? And what does this correspondence mean for teaching? The study employs literature review and case analysis: the former to delineate the theoretical core of flow and the stage structure of choreography teaching, the latter to test the explanatory power of the proposed correspondence.

2. The Theoretical Core of Flow and Its Teachability

Applying flow to teaching requires first clarifying what it is in theory, of what parts it consists, and which of those parts fall within the teachable scope. This section addresses the three questions in turn.

2.1 The Concept of Flow

The concept of flow was distilled by Csikszentmihalyi from his observations of artists’ creative processes in the 1960s. He noticed that painters, when a painting was going well, would forget food and sleep and become fully absorbed, while their interest faded quickly once the work was finished. This suggested that behavior is driven not by external rewards but by the activity process itself (Nakamura & Csikszentmihalyi, 2002). Csikszentmihalyi (1975) defined flow as the holistic experience a person feels when totally engaged in action, and in his 1990 work systematized it as a theory of “optimal experience” (Csikszentmihalyi, 1990, p. 4). Chinese literature renders flow variously as *xinliu*, *liuchang zhuangtai* (flow state) or immersion experience. This paper uses “flow” throughout, but retains the original wording when citing studies such as Ye (2021) that use “flow state.” The terminological differences do

not constitute theoretical disagreement; the terms refer to the same psychological construct.

2.2 Three Preconditions and Six Experiential Characteristics

Nakamura and Csikszentmihalyi (2002) synthesized more than two decades of flow research, distinguishing three preconditions from six experiential characteristics. The three conditions are: clear goals, meaning that the person knows what to do next at every moment; immediate feedback, meaning that the activity itself continuously informs the person whether progress is smooth; and the balance of challenge and skill, meaning that the perceived challenge neither greatly exceeds nor falls significantly below one's skills. The six characteristics are: action–awareness merging, concentration on the task at hand, a sense of control, the loss of reflective self-consciousness, the transformation of time, and the autotelic experience of the activity as its own end. Csikszentmihalyi et al. (2005) further clarified that the three conditions are not parallel “elements” but an “opportunity structure” that can be designed from outside; the six characteristics are experiential outcomes that emerge once the conditions are met.

The pedagogical import of this distinction deserves emphasis. Researchers have accordingly shifted the focus of intervention from “asking students to concentrate” to “designing tasks that make concentration possible.” The Flow State Scale (FSS/FSS-2) and the Dispositional Flow Scale (DFS-2) developed by Jackson and Marsh (1996) and Jackson and Eklund (2002) provide measurable means of testing whether the design of conditions is effective. Wrigley and Emmerson (2013) administered the FSS-2 to 236 students after performance examinations and found not only that the scale was applicable but also that most students’ difficulty was not “lack of concentration” but the belief that their skills were insufficient for the challenge — condition imbalance precedes the absence of the state, and conditions can be adjusted by teachers.

2.3 From States to Conditions: The Teachability of Flow

To introduce flow into teaching, one boundary must first be acknowledged: flow is an emergent state that comes unbidden; teachers cannot issue the instruction “enter flow,” and what is teachable is only the conditions. Making this explicit avoids two errors: treating flow as

classroom decoration, substituting liveliness for engagement; and treating it as a quantifiable assessment indicator, substituting self-report scores for genuine experiential description.

On this premise, the most operational entry points in choreography teaching are four: whether goals can be clearly articulated by students; whether task difficulty matches their current level; whether feedback is timely and specific; and whether evaluation pressure can be reduced enough not to block the withdrawal of the reflective self. The following sections build the correspondence with the stages of choreography teaching along these four threads.

3. The Stage Structure of Choreography Teaching and the State of Flow Research

To establish the correspondence between flow factors and the stages of choreography teaching, coordinates must first be fixed at both ends: one end is the stages into which choreography teaching can be decomposed; the other is how far flow research in dance has progressed and what questions remain unanswered.

3.1 The Stage Structure of Choreography Teaching

Chinese choreography textbooks offer several conventional divisions. *The Chinese Dance Choreography Course* edited by Sun (2004) organizes its content as “introduction — basic choreographic training — dance conception — dance etude creation — dance drama creation,” moving pedagogically from technique toward complete works. Jin’s (2006) *Dance Choreography* takes “the choreographer’s responsibilities — dance structure — choreographic techniques — stage space — dance time — dance expression — collaboration with other arts — work analysis” as its framework, emphasizing the classification of creative elements. Xiao’s (2012) *Contemporary Choreography Theory and Technique* is organized by technical units, proceeding from dance motives and their development through phrases, segments, theme and variation, and canon to solo, duet and dance drama, and concluding with case analyses of three Chinese and foreign dance dramas. Their arrangements differ, but all imply one common sequence: material selection and conception — technical realization — rehearsal adjustment — stage presentation. This sequence is also consistent with Long and Xu’s (2009) basic account of the relation between content and form in dance works.

Building on this consensus, this paper summarizes choreography teaching into four

stages. The first, establishing motive and theme, addresses “what to choreograph and why,” and translates abstract conception into a presentation goal perceivable by an audience. The second, organizing material and training technique, completes the selection and transformation of everyday movements and forms dance language through motive development, phrases and segments, canon, polyphony and other devices. The third, rehearsal feedback and self-observation, revises movement choices and structural arrangements through teacher guidance, video playback, peer observation and self-awareness. The fourth, role immersion and stage presentation, addresses the transition from “executing movements” to “becoming the character,” completing the work’s final form within the performer–spectator relation.

It should be noted that the four-stage division is analytical; in actual teaching the stages often overlap, and rehearsal in particular runs throughout. The purpose of the division is to obtain minimal units for which the supply of conditions can be discussed separately, not to claim that teaching must proceed linearly. This division does not conflict with Hu’s (2016) description of the psychological process of dance creation (dance thinking — subject matter — structure — language — performance — appreciation) or with Ping’s (2004) analysis of dance feeling and proprioception; they differ only in level: the latter divide psychological processes, the former operational teaching stages.

3.2 Research on Flow in Dance

Research intersecting flow with dance in China has proceeded along three lines.

The first is state measurement and characteristic description. Ye (2021), using a qualitative method based on “lived experience,” studied six professional Chinese dancers and found that their flow states did not fully match the nine-dimensional model derived from sport psychology: dimensions such as the balance of skill and challenge, the pleasure of dance itself, total investment in performance and role, and the sense of control over stage and audience were confirmed, whereas “loss of self-consciousness” and “transformation of time” were rarely reported. This suggests that flow in dance is domain-specific and cannot simply copy the dimensional inventory of sport. Wu (2019) studied the structure and characteristics of flow states among Chinese classical dance students,

and Zeng (2020) found in Latin dance classes that flow experience was not widespread, methods for facilitating flow were scarce, and attention to students’ emotional experience was insufficient.

International empirical studies of the last three years have further enriched this line. Costa et al. (2026) measured 152 ballet students aged 15–18 and showed that trait emotional intelligence positively predicts dispositional flow and that flow levels differ with training experience. Thomson and Jaque (2023), in a quasi-experimental study of 288 professional and pre-professional dancers engaged in creating, rehearsing and premiering new works, found that several dimensions of movement-based creative processing predicted state flow, the most prominent predictors being “Clarity and Preparation.” These findings suggest that flow is not ineffable inspiration but a state that can be shaped by prior conditions — precisely the empirical premise of this paper’s argument.

The second line is teaching intervention and elicitation. Wang (2019) discussed how to elicit flow states in dance teaching from the standpoint of “body–mind unity,” regarding the integration of bodily perception as preparatory work for entering flow; this approach can mutually support Ping’s (2004) account of the relations among dance feeling, proprioception and psychological training.

The third line links flow with learning outcomes and curriculum evaluation. Gang (2021) demonstrated through an empirical model that Dance Flow factors influence the learning outcomes of university dance majors and developed a 24-item Dance Flow measurement instrument, providing a tool basis for bringing flow states into course-level evaluation. This line advanced flow from “experience description” to “teaching evaluation,” but the object of evaluation remains the student, and condition design on the teacher’s side is not yet addressed.

3.3 Research Gaps

The gaps can be summarized in three points. First, condition design is absent: existing studies mostly describe whether students “are in flow” and “at what level,” seldom answering “in which stage the teacher should supply which conditions”; measurement has replaced design. Second, stage connection is absent: discussions at the level of curriculum evaluation have brought flow into the teaching field, but they target the whole course and cannot answer how a specific

stage should be adjusted. Third, a mapping tool is absent: no directly usable correspondence has been formed between the conditional dimensions of flow and the stages of choreography teaching; even teachers who accept the value of flow lack a point of operational leverage.

4. The Correspondence Between Flow Factors and Choreography Teaching Stages

This section establishes, stage by stage, the correspondence between the four teaching stages and four groups of flow factors; an overview is given in Table 1.

4.1 Clear Goals: Establishing the Theme and Its Presentation Effect

The first condition of flow is a clear goal, corresponding in choreography teaching to the stage of establishing motive and theme, whose core operation is to translate “conception” into “presentation effect.”

Students’ common problem is not the absence of ideas but ideas that are too large and too abstract. Statements such as “expressing loneliness” or “presenting the contemporary situation of traditional culture” appear frequently in class but cannot guide concrete movement choices: loneliness can be expressed by curling up, by running, or by long stillness. When the goal cannot be concretized, what the student faces is not a manageable challenge but a vague task in which advance and retreat cannot be judged; in flow terms this corresponds to anxiety rather than boredom, because the challenge is perceived as indefinable.

The teaching focus of this stage should therefore be to translate the abstract theme into a statement of effect perceivable by the audience. Following the creative phases and structural elements proposed in Xiao (2012) for dance drama, the translation can proceed in three steps: first determine the final image of the ending (what the audience sees last), then determine the relation that runs through the whole (what changes between whom), and finally work backward to the middle structure (which sections are needed to accomplish this change). This “backward design” shifts the goal from “what I want to express” to “what the audience will see,” thereby attaining the clarity that flow requires. Jin’s (2006) distinction among dramatic, psychological, poetic and symphonic dance structures can serve as a reference when students choose structural paths. The finding of Thomson and Jaque (2023) that “Clarity and Preparation”

were the most prominent predictors of state flow is consistent with this analysis.

4.2 Challenge–Skill Balance: Organizing Material and Training Technique

The second condition of flow — the balance of challenge and skill — corresponds to the stage of organizing material and training technique.

The task of this stage is to select everyday movements and refine them into dance material, then organize them into dance language through motive development, phrase and segment construction, theme and variation, canon, polyphony and other devices. The difficulty of technical training lies in its inherent monotony: a single motive may require dozens of variants, and the differences between variants are often minute. If task difficulty remains below the student’s level for long, the student enters the boredom zone; if the teacher directly assigns tasks far beyond the student’s level, the student enters the anxiety zone. Neither produces flow.

The “six criteria for selecting motives” and the training sequence of “the motive and its development” proposed by Xiao (2012) in effect provide a layered structure: the same motive can be accomplished at the level of “repetition and simple variation” or at the level of “theme and variation and polyphony.” If the teacher accordingly sets three difficulty tiers for the same task — the basic tier requiring changes at the movement level, the intermediate tier requiring changes at the syntactic and structural level, and the advanced tier requiring changes at the level of style and meaning — students can choose tasks near the boundary of their own skills. This echoes the finding of Wrigley and Emmerson (2013): students’ difficulty is often not unwillingness to engage but the belief that their skills are insufficient for the challenge; once tasks are tiered, students can remain in the zone “slightly above their current level.” The exercise designs of Sun (2004) on “the decomposition and variation of movements” and Jin (2006) on “choreographic training of movement elements” can serve as technical resources for such tiering.

It must be emphasized that the balance of challenge and skill is not a one-time match but a continuous reconstruction. Once skill improves, a previously suitable challenge no longer constitutes a challenge. Gang (2008) already noted, in discussing movement motifs in choreography courses, that motive training should not stop at “making variations” but

should aim at “making meaningful variations” — a requirement that itself constitutes a challenge standard rising with skill. Incorporating “whether rising skill is met by a corresponding challenge” into curriculum evaluation would provide an institutional means of maintaining this dynamic balance.

4.3 Immediate Feedback: Rehearsal Feedback and Self-Observation

The third condition of flow is immediate feedback, corresponding to the stage of rehearsal feedback and self-observation.

The feedback structure of dance teaching has a peculiarity: two channels operate simultaneously. The external channel comes from the teacher’s language, video playback and peer observation; the internal channel comes from proprioception, movement quality and the rhythm of breathing (Ping, 2004). Ideally the two channels corroborate each other; in actual classrooms they are often disconnected — the teacher says “softer,” and the student hears an adjective devoid of movement information; video playback presents only appearance, not the way force was exerted at the time.

Making feedback immediate and operable is the core task of this stage, which can be pursued in three ways. First, replace outcome feedback with process feedback: not ending with “this passage does not look good,” but pointing out that “the weight shifted early at the transition of the third bar, which is why it looks broken.” Second, build a feedback chain of “problem — evidence — adjustment”: the weight trajectory visible in the video is the evidence, the weight adjustment is the response, and the inference between the two is completed by the student. Third, control the amount of feedback: one rehearsal addresses only one or two problems that most affect the effect, so that multiple lines of feedback do not arrive simultaneously and re-transform the task into a vague task.

Hu’s (2016) analysis of dance thinking and stage presentation provides the psychological basis: the choreographer’s thought is a process of constant return from material to outcome; if feedback does not return in time, the thought process is interrupted. What Wang (2019) emphasizes as “body–mind unity” means, at the level of feedback, the establishment of the internal channel — the student must, through repeated awareness, gradually map “what I did” onto “what I felt.” The “total investment in

performance and role” and the sense of control over stage and audience reported by Ye (2021) can be seen as experiential outcomes that appear once the feedback channels are unobstructed.

4.4 Loss of Reflective Self-Consciousness: Role Immersion and Stage Presentation

Among the six experiential characteristics of flow, “the loss of reflective self-consciousness” is the most distinctive in dance, corresponding to the stage of role immersion and stage presentation.

A terminological misunderstanding must first be clarified. “Loss of self-consciousness” is popularly understood as a mindless state of self-forgetting, but Ye’s (2021) research shows that among the flow states of professional Chinese dancers, “loss of self-consciousness” and “transformation of time” were rarely reported. This does not negate the characteristic but suggests that its manifestation in dance differs: what disappears is not consciousness but the “reflective self” that stands aside judging oneself. The dancer in absorption has not lost consciousness but has handed it over to the body and the situation — in phenomenological terms, the “body-subject” replaces the “objectified body.”

This distinction has direct pedagogical significance. “Loss of self-consciousness” cannot be pursued directly as a teaching goal: the more the student is told to “forget yourself,” the more the student notices the self. What the teacher can do is reduce evaluation anxiety, thereby reducing the activity of the reflective self. Feasible measures include: structured improvisation that directs attention to the situation rather than the performance (giving identity, relation and circumstance so that the student need only respond within the relation); duet training that cultivates relational attention (the object of attention shifts from self to partner, objectively compressing the space of self-observation); and, at first presentation, removing audience evaluation by splitting stage presentation into two passes, “doing” and “viewing.” Liu et al. (2023) provide direct evidence from the performance setting: in traditional stage performance, public self-consciousness had a negative effect on flow experience, an effect partially mediated by emotional labor strategies. The activation of public self-consciousness is precisely the activation of the “reflective self” in evaluative situations; reducing evaluation

pressure is, in effect, weakening the blockage of flow by public self-consciousness.

The boundary of role immersion also requires attention. Ye (2021) points out that “total investment in performance and role” is a manifestation of action–awareness merging, which means that the criterion of immersion is not “the student says he or she felt it” but “the investment is visible at the level of movement” — movements no longer show pause-like self-

confirmation, and connections become continuous. This externally observable criterion makes the teaching outcome of this stage open to examination, and prevents flow from being reduced to self-report.

4.5 Overview of the Correspondence and Its Underlying Logic

Synthesizing the four sections above yields the correspondence shown in Table 1.

Table 1. Correspondence between choreography teaching stages and flow factors

Stage of choreography teaching	Corresponding flow factors	Conditions the teacher can design
Establishing motive and theme	Clear goals	Translate abstract conception into presentation effect: set the final image, set the through-relation, work backward to structure
Organizing material and training technique	Challenge–skill balance	Set three difficulty tiers for the same motive, kept near the skill boundary and continuously reconstructed
Rehearsal feedback and self-observation	Immediate feedback	Replace outcome feedback with process feedback; build a “problem–evidence–adjustment” chain; a single focus per rehearsal
Role immersion and stage presentation	Loss of reflective self-consciousness	Reduce evaluation anxiety; structured improvisation and relational training; movement continuity as the observable index of engagement

This correspondence embodies three logics. The first is sequentiality: the four groups of factors are arranged in the temporal order of the work’s generation — the goal is established first, then challenge is matched to skill, then feedback corrects movement and structure, and finally immersion and presentation complete the work. Its significance is that a missing condition in an earlier stage propagates to later stages: when the goal is unclear, skill training has nothing to anchor on; when feedback is not timely, immersion lacks the basis for correction. The second is circularity: feedback brings skill growth, and skill growth demands new challenges, returning to the second stage for re-matching; choreography teaching is therefore not a straight line but a spiral shuttling repeatedly between technique and feedback, consistent with the return process of dance thinking described by Hu (2016). The third is indirectness: all four groups of factors are conditions, not states; the teacher supplies the conditions, and the state emerges on the student’s side. Clarifying this clarifies the boundary of the teacher’s

responsibility — the teacher does not guarantee that students enter flow, but is responsible for whether students have the opportunity to enter it.

5. Case Analysis

The following uses two publicly available works and one type of classroom situation to test the explanatory power of the correspondence above. The three cases focus on different correspondence groups and together cover all four.

5.1 Thunder and Rain: Goal Clarity and the Translation into Presentation Effects

Thunder and Rain, choreographed by Wang Mei and adapted from Cao Yu’s play *Thunderstorm*, was premiered in June 2002 by the Experimental Modern Dance Troupe of the Beijing Dance Academy. The work consists of six sections — “Suffocation,” “Lightning,” “Struggle,” “Shattering,” “Release” and “Final Wish” — unfolding through five groups of relations among six characters, and is explicitly framed as an analysis of the characters’ inner emotional

world from a female perspective. Xiao (2012) includes it among the dance drama case analyses in the third part of the textbook, making it a widely circulated teaching case in choreography education.

Viewed through the condition of “clear goals,” the work offers a noteworthy treatment: it does not retell the plot through dance but compresses the original into several groups of relations that can be directly handled by the body. The names of the six sections are not plot titles but state names — “suffocation,” “struggle” and “shattering” describe the psychological situations of the characters, not the events that occur. The choreographer thus translated the goal “what story to tell” into the goal “what psychological relations the audience will see,” thereby attaining the clarity required for structural operation.

The corresponding pedagogical implication is that in the theme-establishing stage, students should be guided to formulate goals in “structure–relation” terms rather than “plot–narration” terms. “I want to show how a family disintegrates under repression” leads to the predicament of not knowing where to begin, whereas “I want the audience to see a set of relations in which the members hurt each other in mutual dependence, and to see this set of relations collapse in the final section” immediately yields operable structural clues. This is precisely an instance of the “presentation–effect statement” described above.

5.2 Matthew Bourne’s *Swan Lake: The Continuous Reconstruction of Challenge and Skill*

Matthew Bourne’s *Swan Lake* premiered at the Sadler’s Wells Theatre in London on 9 November 1995. Its most noted adaptation replaced the traditionally female swan corps with an all-male cast and shifted the narrative focus from the prince’s love to the prince’s own situation. The production won the 1996 Olivier Award, the 1999 Tony Award and more than forty international awards in total, has become one of the longest-running ballet works in the West End and on Broadway, and is included among the dance drama analysis cases in the third part of Xiao (2012).

Bourne’s own creative statements supply a detail directly relevant to choreography teaching: he has repeatedly explained that all choreographic decisions derive from the single idea “the swans are danced by men.” This coincides exactly with

the technical logic of choreography teaching — once the motive is established, phrases, segments, theme and variation, and polyphony all become ways of developing that motive. Viewed through the “challenge–skill balance” condition, this structure keeps the dancers in the high-challenge zone: the lead swan must switch between ferocity and docility, and the prince is on stage for almost the entire work, with high physical and emotional intensity. One of the company’s responses is a training system through which new dancers gradually enter their roles — pedagogically, the actual practice of “task tiering” and “raising the challenge as skill grows.”

The corresponding pedagogical implication is that technique training should be organized around a developable core motive rather than an inventory of techniques. Xiao (2012) places “the dance motive and its development” at the head of the first part, consistent with this approach; the exercise designs of Sun (2004) on “the decomposition and variation of movements” and Jin (2006) on “choreographic training of movement elements” also implement, in different degrees, the principle of deepening a single point.

5.3 Motive-Development Exercises in the Choreography Class: Feedback Chains and Role Immersion

The third case is not a single work but a type of teaching situation that recurs in choreography classes, whose skeleton can be seen in the exercises on “the motive and its development” in the first unit of Xiao (2012) and in the arrangement of “training in improvisational dance” in Sun (2004). A typical progression runs: the teacher gives an everyday action (for example, “holding a chair that is about to fall”); the student develops three or more variants; peers and observers in the front rows give immediate feedback; the teacher, instead of giving answers, poses questions (“In the third variant, your hand arrived half a beat before your body — is that what you wanted?”); the student adjusts accordingly and presents again. Several rounds can be completed within one class, each round containing presentation and response.

Viewed through the “immediate feedback” condition, the value of this chain lies in compressing feedback into the classroom present. The short cycle of “present — respond — present again” allows students to obtain evidence

about the effect of an adjustment while attention has not yet shifted, thereby forming the capacity for “choice–effect” self-observation; by substituting questions for answers, the teacher preserves the student’s ownership of the movement, in keeping with flow theory’s requirement of a sense of control.

Viewed through the “loss of reflective self-consciousness” condition, the handling of the later phase is decisive. When the teacher shifts from “evaluator” to “questioner,” evaluation pressure in the classroom falls, and attention can turn from “did I do it right” to “what will this movement become next.” If structured improvisation is further introduced (specifying the identity or relation from which the movement originates), attention can settle more stably on the situation. This agrees with the direction of “body–mind unity” training described by Wang (2019) and supports the finding of Ye (2021) on “total investment in performance and role.”

It should be noted that this case is a synthesis of teaching designs recorded in textbooks and of common classroom progressions, not a complete record of any particular lesson; its function is to show the feasibility of condition design in ordinary classes, not to provide replicable experimental evidence.

6. Conclusions

Taking flow theory as its framework and employing literature review and case analysis, this paper examined the correspondence between flow factors and the stages of choreography teaching. The main conclusions are as follows.

First, the teachable part of flow is not the state but the conditions. Flow cannot be directly commanded into being; what teachers can design are clear goals, immediate and specific feedback, and challenges matched to skill levels. Replacing “requiring students to be engaged” with “designing tasks that make engagement possible” is the key step for choreography teaching to absorb flow theory.

Second, choreography teaching can be summarized into four stages — establishing motive and theme, organizing material and training technique, rehearsal feedback and self-observation, and role immersion and stage presentation — which correspond respectively to the four groups of flow factors: clear goals, challenge–skill balance, immediate feedback, and the loss of reflective self-consciousness.

Third, the correspondences embody three logics: sequentiality, circularity and indirectness. A missing condition in an earlier stage propagates to later stages; the cycle between technique and feedback constitutes the actual rhythm of teaching; and the teacher’s responsibility ends at the supply of conditions, without crossing into a promise of states.

Five teaching suggestions follow. (1) Add a training unit of “presentation–effect statements” at the theme-establishing stage, requiring students to articulate their conception through the final image and the through-relation. (2) Set three difficulty tiers for the same motive in technique training, and raise the floor of difficulty as skill improves. (3) Replace outcome evaluation with process description in feedback, and limit each rehearsal to one or two focuses. (4) In role-immersion training, prioritize reducing evaluation anxiety through structured improvisation and relational training, and use the continuity of movement rather than self-report scores as the observable index of engagement. (5) Incorporate “whether rising skill is met by a corresponding challenge” into curriculum evaluation, so that the balance of challenge and skill has an institutional mechanism of maintenance.

This study has three limitations. First, it employs literature review and case analysis without classroom experimentation, and the proposed correspondence has not yet been tested by teaching experiments. Second, the four-stage division is analytical and remains distant from the overlapping reality of actual teaching. Third, the publicly available works and textbook cases used in the case analyses differ considerably from ordinary classrooms in group size, class hours and teaching conditions, and their transferability requires further examination. Future research may conduct small-scale teaching interventions in the choreography courses of dance teacher-education programs, combining the Flow State Scale (Jackson & Marsh, 1996; Jackson & Eklund, 2002) with classroom observation, to test whether supplying conditions stage by stage can improve students’ engagement and the completion quality of their works.

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Healing Mechanisms of Therapeutic Theatre for Adolescent Mental Health: A Dual Case Study

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Abstract

As adolescent mental health has risen to the top of the national policy agenda, interventions delivered through theatrical arts such as drama and musical theatre have been emerging rapidly in China, yet their healing mechanisms remain poorly theorized. Combining literature review with case analysis, this study examines two cases: the therapeutic musical theatre *Feier* and the stage play *This Is Not Child's Play*, China's first therapeutic production on adolescent mental health. Analysis proceeds along four dimensions: creation mechanism, narrative structure, healing mechanism, and social effect. Findings are fourfold. First, the two works achieve healing functions—emotional externalization, role reversal, the safe container, and cognitive restructuring—through a “narrative–music–interaction” framework and a strategy of “comedic narration, dual spatiotemporal settings, and clinical collaboration.” Second, music plays a key role in bypassing linguistic defenses and activating emotional channels, while comedic framing constitutes a “defense-bypassing” strategy for adolescent audiences. Third, deep involvement of professional expertise draws the critical boundary between therapeutic theatre and ordinary psychologically themed works. Fourth, moving from isolated “projects” to a replicable “model” requires resolving three bottlenecks: effect evaluation, talent training, and context adaptation. The study proposes a four-stage healing mechanism model of “emotional externalization–cognitive restructuring–relational connection–meaning making,” offering a theoretical basis for the locally grounded construction and standardization of therapeutic theatre.

Keywords: therapeutic theatre, drama therapy, musical theatre, adolescent mental health, arts in healing, flow

1. Introduction

Adolescent mental health has become a public and educational issue of widespread societal concern. The Ministry of Education and sixteen other departments jointly issued the Special Action Plan for Comprehensively Strengthening and Improving Student Mental Health Work (2023–2025), elevating student mental health to a national strategic priority (Ministry of Education

of the PRC et al., 2023). On the clinical side, conventional talk-based psychotherapy faces multiple barriers—linguistic defenses, stigma, and cultural mismatch—so non-verbal, low-cost, community-accessible interventions are gaining attention. A meta-analysis covering 17 countries, 33 studies, and 4,587 children and adolescents shows that creative arts interventions (music, dance, visual arts, drama, etc.) significantly

reduce PTSD symptoms in young people. The pooled effect size of 0.85 is medium-to-large, with particularly pronounced effects in non-Western populations (Appelwhite et al., 2025). A systematic review of adults with anxiety and depression likewise supports the reliable improvements produced by group-based, active artistic interventions (Barnish & Nelson-Horne, 2023).

On the practice side, a number of “therapeutic theatre” works on adolescent mental health have emerged in China in recent years. One is the therapeutic musical theatre *Feier*, which integrates cognitive behavioral therapy (CBT) techniques with artistic emotional externalization through a “narrative–music–interaction” triadic framework, forming a replicable group treatment model (Zhang, 2026). The other is *This Is Not Child’s Play*, premiered in Chengdu in October 2025 as China’s first therapeutic stage play on adolescent mental health. Across six comedic acts, set in a dual spatiotemporal structure of “real life plus an other-world,” the play presents depression, academic pressure, and parent–child communication (Psychology China, 2025). Situated between “artistic performance” and “psychological intervention,” such works have outpaced scholarly discussion of their healing mechanisms, professional boundaries, and locally grounded pathways. Existing studies either focus on clinical techniques of drama therapy or remain at the level of media coverage, lacking mechanism-oriented analyses of specific works across the whole chain of “creation–performance–healing.”

Accordingly, this study poses three research questions: (1) Through what narrative and technical devices do therapeutic theatre works achieve healing functions? (2) What differences and complementarities exist between musical theatre and spoken drama in their healing mechanisms? (3) What structural conditions does therapeutic theatre need in order to move from individual practice to a generalizable model? Answering these questions can provide theoretical support for the local practice of arts in healing and inform cross-sector collaboration between university arts education and mental health services.

2. Literature Review and Theoretical Foundation

2.1 From Psychodrama to Drama Therapy: The Theoretical Tradition and Recent Evidence

Drama therapy and psychodrama belong to a continuum of drama-based psychological intervention, with action and role-play as their core methods. Psychodrama transformed isolated individual therapy into “treating the individual in the group,” emphasizing spontaneity and creative process over creative product. An integrative systematic review of psychodrama psychotherapy confirms steady growth in research output and consistent intervention effects in recent years, providing continuing empirical support for drama-based intervention (Orkibi & Feniger-Schaal, 2019). Since psychodrama was introduced to China in the 1980s, it has spread from hospitals and schools to communities, and domestic research literature has continued to accumulate (Chen, 2017). In practice, localized schools have taken shape: Yi Shu psychodrama, founded by the Chinese American psychologist Gong Shu; spiral psychodrama, derived from the trauma-oriented Therapeutic Spiral Model (TSM); and campus psychodrama, created by Chinese psychodramatists (Sang et al., 2018). An integrative systematic review of drama therapy further summarizes the field’s shared mechanisms: individuals gain psychological distance by playing the roles of others and develop the flexibility to move among multiple roles. Performance-oriented drama work, moreover, transforms inner issues into aesthetic expressions of public significance (Feniger-Schaal & Orkibi, 2020). This mechanism chain of “role-play–role distance–performance integration” offers a direct theoretical anchor for understanding publicly oriented therapeutic theatre works such as *Feier* and *This Is Not Child’s Play*.

2.2 Common Mechanisms of the Creative Arts Therapies and the Therapeutic Role of Music

A scoping review of mechanisms of change in the creative arts therapies (including art, dance/movement, drama, and music therapy, psychodrama, and bibliotherapy) identifies nineteen domains of therapeutic factors, among which “embodiment,” “concretization,” and “symbolism and metaphors” are unique to the arts therapies. Together they support the bypassing of verbal defenses and the externalization and symbolization of emotion through artistic media (De Witte et al., 2021). Regarding depression intervention, psychodrama works through establishing safety, catharsis, and cognitive improvement, with

techniques such as mirroring and role reversal directly supporting cognitive restructuring (Chen et al., 2019). Music further widens the channel of drama therapy. In musical theatre, sung passages carry emotional externalization, giving voice to emotions that defy verbal expression, so that emotional expression and cognitive processing unfold together within the musical structure (Zhang, 2026). These studies jointly suggest that the therapeutic potential of theatrical arts arises not from “watching a play” per se, but from specific configurations of narrative, music, body, and group interaction.

2.3 Therapeutic Theatre: Evidence and Conceptual Definition

In recent years, “therapeutic theatre” has gradually crystallized as a branch of drama therapy. Tailored therapeutic musical theatre projects designed for community engagement have emerged internationally, connecting mental health services with public education through staged performance (Windle, 2024). A systematic review shows that drama therapy yields positive symptom relief for depression, anxiety, and trauma-related symptoms, though the overall evidence base remains thin (Feniger-Schaal & Orkibi, 2020). In Chinese scholarship, a case study of *Feier* has analyzed its “narrative–music–interaction” triadic treatment framework and the challenges of standardization (Zhang, 2026). Synthesizing the literature, this study defines therapeutic theatre as a form of theatrical practice that takes theatre arts (spoken drama, musical theatre, etc.) as its medium and is oriented toward specific psychological intervention goals. It involves structured participation or review by professional mental health expertise, and produces emotional regulation, cognitive improvement, and relational support for participants or audiences. It differs from ordinary psychologically themed works in three respects: explicitness of intervention goals, structural involvement of mental health expertise, and an evaluative orientation toward healing effects.

2.4 Introducing the Flow Perspective

Flow theory holds that when the challenge of an activity matches individual skill, with clear goals and immediate feedback, a person enters a state of optimal experience marked by total

concentration and dissolution of self-consciousness. A recent conceptual analysis confirms that high enjoyment and deep absorption distinguish flow from ordinary task involvement (Abuhamdeh, 2020). Flow is naturally akin to artistic activity: the immersive quality of the arts makes artistic engagement a natural setting for flow, and flow experience is closely associated with positive emotion and enhanced self-efficacy. A large-sample empirical study in dance education has verified the central role of flow in learning gains and its moderation by teacher–student interaction (Gang, 2021).¹ Introducing the flow perspective into therapeutic theatre analysis answers a key question: why “watching” and “performing” in non-therapeutic settings can produce effects resembling psychological intervention. The mediating mechanism is precisely the deeply immersive flow experience. Accordingly, this study constructs a four-dimensional analytical framework of “creation mechanism–narrative structure–healing mechanism–social effect,” with flow as the theoretical lens for understanding how healing experience is generated.

3. Research Design

3.1 Method

This study adopts a qualitative design combining literature review with case analysis. The literature review serves two purposes: to construct the analytical framework from core literature on drama therapy, the creative arts therapies, and flow theory; and to gather all accessible textual materials on the two cases. These materials include play scripts, official promotional materials, interviews with the creative teams, performance information, and prior studies. Literature searches covered CNKI, Wanfang Data, PubMed, Web of Science, and Google Scholar. Search terms included “drama therapy,” “therapeutic theatre,” and “musical theater intervention,” together with their Chinese equivalents.

Case analysis adopts an embedded dual-case design following the principles of typicality and maximum variation: *Feier* represents the “participation-oriented therapeutic musical theatre” form, emphasizing group interaction and musical intervention; *This Is Not Child’s Play*

¹ Gang (2021) is the doctoral dissertation from the author’s research team, in which the 24-item Dance Flow scale was developed and validated; it is cited here as the empirical source of the flow construct applied in this study.

represents the “spectator-oriented psychologically themed spoken drama” form, emphasizing public performance and comedic narration. The two cases differ systematically in art form, performance–audience relation, and mode of professional involvement, satisfying the structural conditions for cross-case comparison.

3.2 Data Sources and Analytical Procedure

Case materials are all publicly available: for *Feier*, an existing academic case study (Zhang, 2026), a topic-incubation seminar report (Music China, 2026), and public reports; for *This Is Not Child’s Play*, interviews with the creative team (Chengdu Business Daily, 2025), premiere reports (Sichuan Observer, 2025), and official introductions (Psychology China, 2025). It should be noted that this study involves no first-hand field data; all case information was cross-verified across multiple sources, and conclusions are limited to the practices documented in public materials. The analysis proceeds in three steps: first, internal descriptive analysis of each case along the four dimensions of “creation mechanism–narrative structure–healing mechanism–social effect”; second, structured cross-case comparison to identify differences and complementarities between the two theatrical forms; third, explanatory discussion drawing on drama therapy and flow theory to distill an integrative mechanism model.

4. Case Analysis

4.1 *Feier: Group Healing Under the “Narrative–Music–Interaction” Framework*

Creation mechanism: authenticity grounded in fieldwork. *Feier* was created through a systematic fieldwork mechanism: the creative team collected materials from adolescents’ real-life situations, rooting the plot in lived experience rather than imaginative projection (Zhang, 2026). At the project’s incubation seminar, experts characterized its paradigm as “scientific intervention—artistic transformation—social empathy” (Music China, 2026). This mechanism is significant in two respects. Methodologically, it ensures the fit between plot and the target group’s psychological experience, avoiding the stereotyped writing common to mental health themes. Therapeutically, authentic material constitutes the premise of participants’ “being seen”: when onstage dilemmas closely match one’s own experience, emotional involvement and identification occur naturally.

Narrative structure: role reversal and symbolic

agency. The play’s core narrative device is “narrative role reversal”: participants symbolically exchange positions with their roles, turning from passive experiencers into active agents, thereby gaining a sense of control within a safe dramatic frame (Zhang, 2026). This is highly consistent with the drama therapy mechanism of “role-play–role distance” (Feniger-Schaal & Orkibi, 2020): role reversal creates the psychological distance needed to observe one’s own predicament while expressing, through the protective shell of the role, emotions suppressed in reality. Notably, the work also converts traditional cultural elements into therapeutic tools, giving the healing process cultural resonance and making psychological intervention feel less alien (Zhang, 2026).

Musical dimension: pairing emotional externalization with cognitive restructuring. The most distinctive feature of *Feier* as a musical is the pairing of CBT’s cognitive restructuring with music’s expressive function: sung passages carry emotional externalization, while narrative progression embeds the thread of cognitive adjustment, so that emotional expression and cognitive processing unfold together in the musical structure (Zhang, 2026). This “dual-channel” design echoes research on the mechanisms of the creative arts therapies: emotion moves first and cognition follows, with “concretization” and “symbolization” making implicit experience tractable (De Witte et al., 2021; Chen et al., 2019).

Interaction dimension and boundaries of effect. *Feier* is delivered in group form; group interaction constitutes a “safe container”: witnessing and resonance among members lower the psychological risk of expression and amplify collective healing effects. Yet the case also exposes common bottlenecks of therapeutic theatre: no established effect evaluation system, shortage of professional therapists, and the difficulty of adapting to new contexts when scaling from single projects to replicable models (Zhang, 2026).

4.2 *This Is Not Child’s Play: Spectator Healing Through Comedic Narration and Dual Spacetime*

Creation mechanism: full-process clinical review. *This Is Not Child’s Play* originated in the chief producer’s real-life experience of registering a child at a psychiatric outpatient clinic, and narrates the story of a ninth-grade girl developing depression under intense family

pressure (Sichuan Observer, 2025; Chengdu Business Daily, 2025). Its most prominent mark of professionalism is full-process medical review: experts from the Sichuan Provincial Health Commission and senior clinical psychologists reviewed the script throughout, ensuring professional representation of depression and related clinical features (Chengdu Business Daily, 2025; Psychology China, 2025). This “clinical collaboration” mechanism remains rare among psychologically themed works. It upgrades the work’s professional credibility from “theme sensitivity” to “medical endorsement,” and constitutes the structural boundary separating therapeutic theatre from ordinary artistic performance.

Narrative structure: six comedic acts and the dual spacetime of “reality plus other-world.” The play transforms heavy issues—depression, academic pressure, intergenerational communication—into six acts of comedic dramaturgy (Psychology China, 2025). Comedic framing does not dissolve the seriousness of these issues; rather, it is a “defense-bypassing” strategy toward adolescent audiences: comedy lowers resistance and stigma around psychological concerns, allowing audiences to approach difficult experiences through laughter. The dual spacetime of “real life plus an other-world,” uses symbolic scenes to concretize psychological pressure, rendering

invisible inner states visible on stage (Psychology China, 2025). This treatment is isomorphic with the “externalization” and “symbolization” mechanisms of the creative arts therapies. Implicit emotional states are translated into observable, discussable objects, granting audiences psychological distance to examine their own situations (De Witte et al., 2021).

Performance–audience relation: healing transmission from “watching” to “being moved.” Unlike *Feier’s* participatory group intervention, *This Is Not Child’s Play* achieves healing transmission mainly through public performance: audience feedback indicates significant emotional resonance for both parents and adolescents (Psychology China, 2025). Its target audience in fact comprises two groups: adolescents obtain emotional compensation through role identification, while parents reconstruct their understanding of their children’s predicament by watching the play, indirectly influencing the family interaction system. This “dual-audience” design suggests that spectator-oriented therapeutic theatre, though not delivering direct group intervention, may generate spillover effects by changing the cognitive environment of the family system.

4.3 Cross-Case Comparison: Differences in Healing Mechanisms Between Two Theatrical Forms

Table 1.

Dimension	<i>Feier</i>	<i>This Is Not Child’s Play</i>
Art form	Therapeutic musical theatre	Psychologically themed spoken drama
Performance–audience relation	Participation-oriented, group intervention	Spectatorship-oriented, public performance
Role of music	Core healing channel (externalization + restructuring)	Background and atmosphere
Core narrative device	Narrative role reversal	Comedic framing + dual spacetime
Professional involvement	Fieldwork mechanism + CBT framework	Full-process clinical medical review
Healing pathway	Direct intervention (participants)	Indirect transmission (audiences / family system)
Key bottlenecks	Evaluation, talent training, context adaptation	Audience positioning, effect generalization

Note: dimensions are derived from this study’s four-dimensional analytical framework.

The comparison reveals three findings. First, music plays an irreplaceable role as an emotional

channel. *Feier* assigns emotional externalization and cognitive restructuring directly to sung

passages, whereas *This Is Not Child's Play* must rely on dialogue and acting. The former conforms to evidence that embodiment and symbolism bypass linguistic defenses (De Witte et al., 2021); the latter compensates with comedic forms that lower defenses. Second, the "safe container" is constructed by different yet convergent paths. Participatory theatre builds the container through group norms and therapeutic facilitation (Zhang, 2026); spectator theatre relies on the "theatrical frame"—the darkened auditorium, the implicit contract of spectating, and the psychological permission of comedy—to make heavy issues discussable. Third, professional expertise occupies different positions. In *Feier*, professionalism is embedded in the creation method (fieldwork, CBT framework); in *This Is Not Child's Play*, it is attached to the review mechanism (clinical medical review). The former is deeper but costlier; the latter is more scalable but limited in intervention depth.

5. Discussion

5.1 A Four-Stage Model: Emotional Externalization–Cognitive Restructuring–Relational Connection–Meaning Making

Synthesizing the dual-case evidence with existing theory, this study proposes a four-stage model of the healing mechanism of therapeutic theatre. Emotional externalization is the starting point: theatre translates implicit emotion into perceivable external objects through roles, music, and symbolic scenes. Cognitive restructuring is the pivot: narrative progression and role switching lead individuals to reinterpret their own experience. Relational connection is the amplifier: the resonance of group witnessing or family co-viewing embeds individual experience into relational networks. Meaning making is the destination: when personal predicament is narrated, responded to, and aestheticized in the theatre, the individual can reset the self-narrative within a larger framework of meaning. The four stages are not strictly linear but spiral forward within the immersion of flow experience (Abuhamdeh, 2020). Deep immersion suspends self-defenses, allowing the stages to operate with little resistance. This also explains the divide between therapeutic theatre and ordinary psychologically themed performance: the former consciously designs and orchestrates these mechanisms; the latter encounters them only by chance.

5.2 Implications for Local Development: Three

Pathways

First, institutionalizing clinical collaboration. The clinical review mechanism of *This Is Not Child's Play* should be upgraded from individual practice to industry standard, specifying the division of labor among mental health professionals in script development, performance implementation, and on-site support. This would prevent therapeutic theatre from sliding into unprofessional "healing marketing." Second, conscious cultural translation. *Feier's* conversion of traditional cultural elements into therapeutic tools suggests that China's rich cultural resources—traditional opera, folk music, seasonal customs—are themselves a matrix of healing narrative. Combined with meta-analytic evidence of stronger effects in non-Western populations (Applewhite et al., 2025), therapeutic theatre rooted in local culture may hold distinctive advantages. Third, building evaluation systems. Both cases lack systematic effect evaluation—the greatest constraint on the field's development. Future work may introduce standardized psychological measures before and after performances, combined with qualitative observation, to form a dual framework of "aesthetic effect plus psychological effect" and provide the evidence base for moving from "project" to "model" (Zhang, 2026; Feniger-Schaal & Orkibi, 2020).

5.3 Limitations

Three limitations must be stated. First, case materials derive from public texts and reports without first-hand experience of performances or participants; the analysis of healing mechanisms combines theoretical inference with material analysis, and its ecological validity awaits verification. Second, the two cases are not fully equivalent in scale, duration, and audience; cross-case conclusions should be read as analytical generalization rather than statistical generalization. Third, the effect boundaries of therapeutic theatre (indications, contraindications, ethical boundaries) lack clinical evidence. The mechanism model proposed here is a theoretical construction requiring subsequent empirical testing.

6. Conclusions

Feier and *This Is Not Child's Play* represent two exploratory forms of therapeutic theatre in China: the former achieves direct intervention through the participation and collectivity of

musical theatre; the latter achieves spectator healing through the public reach and communicative power of spoken drama. Together they demonstrate that the healing potential of theatrical arts arises from the organic configuration of narrative, music, body, and interaction, while the structural involvement of professional mental health expertise delineates the boundary between therapeutic theatre and ordinary artistic works. As arts in healing moves toward formal disciplinary status, therapeutic theatre is positioned to become a key hub connecting arts education and mental health services—offering adolescents a low-threshold channel of psychological support—“healing without diagnosis”—and opening new avenues of social service for university arts programs. Future research should proceed on three fronts—evidence-based evaluation, talent training, and cultural translation—moving therapeutic theatre from scattered “works” toward a mature “model.”

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