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Practicum satisfaction and its influencing factors among student teachers in early childhood education

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ABSTRACT

Teaching practicum satisfaction is a critical indicator of the quality of teacher education, as it is closely linked to student teachers' professional readiness, teaching commitment, and long-term career development. However, evidence regarding practicum satisfaction among student teachers in early childhood education within the Chinese context remains limited, particularly concerning the influence of demographic and practicum-related factors. This study investigates the overall level of practicum satisfaction and its influencing factors among student teachers majoring in early childhood education. An explanatory sequential mixed-methods design was employed, starting with questionnaire data collected from 287 student teachers in Anhui Province, China, followed by focus group interviews with 15 participants to elucidate and enrich the quantitative findings. The results indicated that overall practicum satisfaction was moderate rather than ideal; satisfaction with practicum content and school-level organization was relatively high, whereas satisfaction with supervision by university teachers was the lowest. Significant differences were identified based on gender, household registration, type of practicum institution, and mode of practicum arrangement. The findings suggest that enhancing practicum quality necessitates improved coordination between universities and schools, more sustained supervision, and differentiated support mechanisms that respond to the diverse backgrounds and practicum contexts of student teachers. This study contributes new mixed-methods evidence indicating that practicum satisfaction is a multidimensional, context-sensitive, and process-dependent construct shaped by institutional support, demographic background, placement context, and practicum adaptation.

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1. INTRODUCTION

Educational quality remains a central concern in global educational reform, and teacher education is widely recognized as a key pathway to enhancing educational quality across various contexts [1]. Teachers, as the primary agents who translate curriculum, pedagogy, and educational values into classroom practice, make high-quality teacher preparation a priority in many countries [2]. Consequently, contemporary teacher education necessitates that student teachers not only develop ethical awareness and subject knowledge but also acquire digital literacy, systematic teaching skills, and practical competence for navigating complex school environments [3], [4]. In this context, teaching practicum serves as a crucial component of teacher preparation, bridging university-based learning with authentic educational practice.

The teaching practicum offers student teachers structured opportunities to integrate theoretical knowledge with practical teaching experience [5]. Previous research conducted in various cultural and institutional contexts has demonstrated that practicum experiences significantly contribute to the professional development, formation of professional identity, and readiness to enter the teaching profession among student teachers [6], [7]. Furthermore, the practicum serves as an experiential learning environment where student teachers engage with classroom interactions, address children's developmental needs, provide emotional support, and tackle instructional challenges [8]. Through these immersive practicum experiences, student teachers can cultivate instructional strategies, enhance classroom management skills, and adopt context-appropriate teaching methods that are rooted in local educational settings [9].

Mentoring and collaborative learning are central themes in previous practicum research. The practicum provides student teachers with opportunities to receive guidance from experienced educators, observe professional practices, and engage in collaborative problem-solving related to instruction [10]. Through reflective dialogue and guided observation, student teachers can enhance their understanding of teaching strategies while gradually internalizing professional values and ethical norms [11]. Concurrently, existing studies indicate that teacher identity during the practicum is influenced by environmental conditions, emotional experiences, guidance from teachers, and personal backgrounds [12]. Within practicum settings, student teachers progressively negotiate their professional roles through adaptation, conflict resolution, and interactions with various stakeholders [13].

Practicum satisfaction has emerged as a significant indicator for assessing the quality of practicum programs [14]. It encompasses student teachers' overall subjective evaluation of whether their practicum experiences align with their expectations and developmental needs, including their perceptions of practicum arrangements, support systems, and learning outcomes [15]. Previous study indicated a close relationship between practicum satisfaction and student teachers' learning motivation and active engagement during their practicum [16]. From a career development perspective, higher levels of practicum satisfaction may enhance professional commitment and the willingness to teach, thereby contributing to the stability and sustainability of future teaching careers [17]. Conversely, low practicum satisfaction can diminish student teachers' sense of competence, decrease their willingness to remain in the teaching profession, and hinder the formation of a stable professional identity [18]. In the context of early childhood education, insufficient practicum support may further impair student teachers' readiness to address the developmental, emotional, and instructional needs of young children [19].

Existing research on practicum satisfaction has employed quantitative, qualitative, and mixed-methods approaches, each contributing distinct forms of evidence [20]. Quantitative surveys are particularly effective for measuring the overall level of practicum satisfaction and identifying variations across student characteristics or practicum conditions [21]. When satisfaction is conceptualized as a multidimensional construct, it typically encompasses dimensions such as administrative support, supervision quality, instructional guidance, and the teaching environment [22], [23]. However, quantitative studies may not adequately elucidate why student teachers interpret similar practicum arrangements differently or how their emotional experiences evolve during the practicum [24], [25]. Qualitative research addresses this limitation by examining student teachers lived experiences, emotional perceptions, and sociocultural contexts [26]. Techniques such as in-depth interviews, focus groups, and narrative analysis are instrumental in uncovering the subjective meanings and dynamic changes inherent in practicum experiences [27], [28].

In teacher education systems, the value of the practicum lies in its ability to bridge theoretical pedagogy with authentic classroom practice, while practicum satisfaction reflects the effectiveness of this connection as experienced by student teachers [29]. In recent years, research on practicum satisfaction and professional development among student teachers in China has increased [30], [31]. These studies have enhanced our understanding of practicum experiences within the Chinese educational context; however, many of them continue to focus on single variables, isolated institutional cases, or general teacher education populations [32]. This focus limits a comprehensive understanding of how practicum satisfaction is developed among early childhood student teachers, whose practicum experiences encompass not only teaching practice but also caregiving responsibilities, emotional adaptation, and close interactions with young children.

Building on this literature, three significant research gaps remain [33]–[35]. First, there is limited empirical evidence examining practicum satisfaction among student teachers majoring in early childhood education as a distinct group in China. Second, demographic and practicum-related factors-such as gender, household registration, type of practicum institution, practicum arrangement mode, and income level-have rarely been analyzed collectively to explain differences in practicum satisfaction. Third, few studies have integrated quantitative analysis with qualitative explanations to clarify the reasons behind these differences and how student teachers' satisfaction evolves during the practicum process. These gaps underscore the necessity for a study that combines statistical evidence with contextual interpretation.

To address these gaps, this study examines the overall level of practicum satisfaction and its influencing factors among student teachers majoring in early childhood education in Anhui Province, China. The research is guided by three primary questions:

- What is the overall level of practicum satisfaction among student teachers in early childhood education?
- Are there significant differences in practicum satisfaction across demographic and practicum-related variables?
- How do student teachers articulate the factors and experiences that shape their practicum satisfaction?

These questions align with an explanatory sequential mixed-methods design, wherein quantitative results identify patterns, and qualitative interviews provide contextual explanations.

The theoretical contribution of this study is the conceptualization of practicum satisfaction as a multidimensional, context-sensitive, and process-dependent construct, rather than a singular end-point evaluation. The empirical contribution is rooted in the application of an explanatory sequential mixed-methods design, which links group differences to student teachers' explanations of their practicum experiences. The practical contribution provides evidence for universities and practicum schools to enhance supervision, improve university-school coordination, and develop differentiated support mechanisms for student teachers in early childhood education.

2. METHOD

2.1. Research design

This study employed an explanatory sequential mixed-methods design, initiating with a quantitative phase followed by a qualitative phase aimed at elucidating and deepening the quantitative findings. In the first phase, a structured questionnaire assessed practicum satisfaction among student teachers specializing in early childhood education. Descriptive statistics, independent-samples t-tests, and one-way analysis of variance were performed to identify overall patterns and group differences. The second phase involved focus group interviews designed based on the quantitative results, particularly targeting dimensions with lower satisfaction scores and variables exhibiting significant differences. The integration of the two phases adhered to a clear research flow: a quantitative survey, statistical analysis, participant selection for interviews, qualitative explanation, and integrated interpretation. This design was appropriate as it allowed the study to merge the breadth of survey data with the contextual depth of interview evidence, thereby elucidating not only the existing differences but also the underlying reasons for these differences [36].

2.2. Research sample

The participants in this study were student teachers majoring in early childhood education at University S, located in Anhui Province, China. University S is a well-established normal university, hosting students from 28 of China's 32 provinces, with an enrollment exceeding 20,000 students and training over 4,000 prospective teachers annually. For the quantitative phase of the research, total population sampling, also known as census sampling, was employed. This method was selected because it allowed for the inclusion of all eligible student teachers in the program who had completed the formal teaching practicum. The target population was clearly defined, accessible through the university's practicum management system, and manageable in size. The questionnaire was distributed online to all 300 eligible student teachers who constituted the accessible population for this study as part of the university's practicum evaluation process, yielding 287 valid responses after data screening; this sample size was considered adequate because it provided more than eight respondents per item for the 33-item practicum satisfaction scale [37].

The inclusion criteria for the quantitative phase required participants to be student teachers majoring in early childhood education at University S, have completed the formal teaching practicum mandated by the program, and voluntarily complete the questionnaire independently. Questionnaires exhibiting logical inconsistencies, patterned responses, or implausible completion times were excluded from the final analysis. For the qualitative phase, criterion-based purposive sampling was employed to recruit 15 participants from the valid survey respondents who expressed a willingness to engage in focus group interviews and could provide rich, informative accounts of their practicum experiences. This qualitative sampling strategy was implemented to ensure that the interview data could elucidate the quantitative findings in greater depth, particularly concerning the lower-scoring dimensions and statistically significant group differences.

2.3. Instruments

The questionnaire was developed based on a review of existing literature and comprises two sections. The first section gathered demographic and practicum-related information, including gender, household registration, type of practicum kindergarten, income level during the practicum, and the method of securing the practicum placement. The second section assessed practicum satisfaction and was adapted from

related studies [38]–[41]. This scale encompassed six dimensions: university-based organization and management, supervision by university faculty, supervision by practicum-school teachers, school-based organization and management, practicum content, and practicum environment. Each dimension included a minimum of three items, culminating in a total of 33 items. The questionnaire employed a 5-point Likert scale, ranging from 1=strongly disagree to 5=strongly agree.

The reliability and validity procedures were conducted prior to the formal survey. A pilot test was administered involving 52 student teachers majoring in early childhood education, with Cronbach's alpha utilized to assess the internal consistency of the instrument [42]. The overall Cronbach's alpha coefficient was 0.941, indicating strong reliability. To evaluate content validity, a panel of 12 experts, comprising university professors, doctoral students, and senior kindergarten teachers, reviewed the questionnaire and confirmed that its structure and items were appropriate for measuring practicum satisfaction. Additionally, exploratory factor analysis was performed to assess construct validity, yielding a Kaiser-Meyer-Olkin (KMO) value of 0.892, which indicates that the data were suitable for factor analysis. These findings support the reliability and validity of the questionnaire employed in the formal study.

2.4. Data collection and analysis

The distribution and collection of the questionnaire were conducted using the "questionnaire star" platform, a widely utilized online survey service in China [43]. A total of 300 eligible student teachers were invited via email and requested to complete the questionnaire independently within a specified timeframe. All participants were informed that the data would be used solely for academic research purposes, and their participation was both voluntary and anonymous. The study received approval from the relevant ethics review board, and informed consent was obtained from all participants. Following the quantitative phase, 15 student teachers were invited to participate in focus group interviews, with all interview participants signing written consent forms.

Quantitative data were exported in an Excel format and screened prior to analysis. Invalid questionnaires, characterized by logical inconsistencies or implausible completion times, were excluded, resulting in 287 valid responses and an effective response rate of 95.7%. The IBM SPSS version 29.0 was employed to perform descriptive statistics, independent-samples t-tests, and one-way analysis of variance. Descriptive statistics were utilized to assess the overall level and dimensional characteristics of practicum satisfaction, while inferential statistics were applied to identify differences across demographic and practicum-related variables. These procedures ensured that the quantitative analysis was directly aligned with the first two research questions.

Qualitative data were collected through three focus group interviews, each consisting of five participants. Each interview lasted approximately 50 to 60 minutes and was conducted face-to-face in a quiet meeting room on campus. The interview protocol was developed based on the quantitative findings, focusing on lower-scoring dimensions and significant group differences, such as university-based supervision, school-based support, gender-related experiences, and practicum adaptation. All interviews were audio-recorded with the participants' consent, transcribed verbatim, and coded in relation to the six dimensions of the practicum satisfaction scale, while also allowing supplementary themes to emerge [44]. The researchers initially coded the transcripts independently and subsequently compared their interpretations through discussion until a consensus was reached. Finally, the qualitative findings were integrated with the quantitative results to explain and contextualize the statistical patterns, rather than producing a separate set of conclusions.

3. RESULTS AND DISCUSSION

3.1. Descriptive results of participant characteristics

Among the 287 questionnaires received, 15 respondents identified as male, accounting for approximately 5.2% of the total, while 272 identified as female, representing about 94.8%. This gender distribution may be linked to the field of study, as the gender imbalance among kindergarten teachers is a significant issue globally [45]. Concerning household registration locations, 73 students (approximately 25.4%) hailed from urban areas, while 214 students (approximately 74.6%) came from rural areas. A total of 123 students (42.9%) completed their practicum in government-run kindergartens, 114 students (39.7%) undertook their practicum in private kindergartens, and 50 students (17.4%) were placed in other educational training institutions. In response to the question, "Who assisted you in securing your practicum placement?", 127 students (44.3%) indicated that the placement was arranged by the university, 102 students (35.5%) reached out to the practicum units independently, 49 students (17.1%) were referred by family members or relatives, and 9 students (3.1%) obtained placements through teachers. Regarding practicum remuneration, 155 students (approximately 54%) reported an income below 1,800 RMB (approximately USD 265), while 132 students (approximately 46%) reported earnings above this threshold.

3.2. Descriptive results of practicum satisfaction

Table 1 presents the descriptive results of practicum satisfaction among student teachers in early childhood education. The overall mean score was 3.33 (SD=0.41), indicating a moderate level of practicum satisfaction. Among the six dimensions, practicum content received the highest score (M=3.84, SD=0.95), followed by school-based organization and management (M=3.66, SD=1.14) and supervision by practicum-school teachers (M=3.57, SD=1.02). In contrast, supervision by university teachers received the lowest score (M=2.61, SD=1.08), suggesting that university-based follow-up support was the weakest aspect of the practicum experience.

The descriptive results indicate that student teachers generally evaluated practicum content and school-based support more positively than university-level supervision. This pattern reveals an uneven distribution of satisfaction across the six dimensions. Specifically, the disparity between practicum content and university-based supervision suggests that student teachers' satisfaction was greater in relation to direct practicum tasks than in relation to ongoing guidance from the university.

Table 1. Overall practicum satisfaction among student teachers in early childhood education (N=287)

Dimension	Max	Min	M	SD
University-based organization and management	5	1	3.00	0.81
Supervision by university teachers	5	1	2.61	1.08
Supervision by practicum-school teachers	5	1	3.57	1.02
School-based organization and management	5	1	3.66	1.14
Practicum content	5	1	3.84	0.95
Practicum environment	5	1	3.28	1.13
Overall practicum satisfaction	5	1	3.33	0.41

Note: M=mean; SD=standard deviation.

3.3. Influencing factors of student teachers' practicum satisfaction

Table 2 presents the inferential results examining differences in practicum satisfaction across gender, household registration, and income level. Independent samples t-tests were employed, as each comparison variable consisted of two groups. The findings indicate that several dimensions of practicum satisfaction significantly differ based on student characteristics. Specifically, for gender, significant differences were observed in the supervision provided by university teachers, supervision by practicum-school teachers, and the content of the practicum. Male students reported higher levels of satisfaction with supervision from practicum-school teachers and the practicum content, while their satisfaction with university supervision was significantly lower compared to that of female students.

Table 2. Differences in practicum satisfaction across selected demographic variables (N=287)

Dimension	Comparison variable	Group 1	M±SD	Group 2	M±SD	P-value
University-based organization and management	Gender	Male	2.73±0.70	Female	3.01±0.82	0.198
	Household registration	Urban	2.78±0.80	Rural	3.07±0.81	0.008**
	Income level	≤1,800	3.00±0.83	>1,800	2.99±0.80	0.937
Supervision by university teachers	Gender	Male	1.53±0.83	Female	2.67±1.06	<0.001**
	Household registration	Urban	1.96±0.96	Rural	2.83±1.03	<0.001**
	Income level	≤1,800	2.50±1.07	>1,800	2.73±1.09	0.081
Supervision by practicum-school teachers	Gender	Male	4.73±0.46	Female	3.51±1.00	<0.001**
	Household registration	Urban	3.03±0.97	Rural	3.76±0.97	<0.001**
	Income level	≤1,800	3.43±1.04	>1,800	3.74±0.97	0.009**
School-based organization and management	Gender	Male	3.40±1.30	Female	3.67±1.13	0.373
	Household registration	Urban	2.90±1.00	Rural	3.91±1.06	<0.001**
	Income level	≤1,800	3.54±1.13	>1,800	3.80±1.13	0.053
Practicum content	Gender	Male	4.87±0.35	Female	3.78±0.94	<0.001**
	Household registration	Urban	3.73±0.84	Rural	3.88±0.98	0.236
	Income level	≤1,800	3.76±0.95	>1,800	3.93±0.94	0.129
Practicum environment	Gender	Male	3.07±1.10	Female	3.29±1.13	0.455
	Household registration	Urban	2.71±0.81	Rural	3.47±1.16	<0.001**
	Income level	≤1,800	2.92±1.08	>1,800	3.59±1.08	<0.001**
Overall practicum satisfaction	Gender	Male	3.39±0.43	Female	3.32±0.41	0.539
	Household registration	Urban	2.85±1.70	Rural	3.49±0.34	<0.001**
	Income level	≤1,800	3.30±0.46	>1,800	3.35±0.35	0.328

Note: M=mean; SD=standard deviation. Independent-samples t-tests were used for gender, household registration, and income level comparisons. **p<0.01.

For household registration, rural student teachers reported significantly higher satisfaction than urban student teachers in university supervision, practicum-school supervision, school-based organization and management, practicum environment, and overall practicum satisfaction. This result indicates that residential background was one of the most consistent factors associated with differences in practicum satisfaction. For income level, significant differences were found in practicum-school supervision and practicum environment, with students earning above 1,800 RMB reporting higher satisfaction in both dimensions. However, income level was not significantly related to overall practicum satisfaction.

Overall, the inferential results show that practicum satisfaction was not experienced evenly across student groups. Household registration showed the broadest pattern of significant differences, while gender and income level were associated with specific dimensions rather than all aspects of satisfaction. These results suggest that student background variables were related to specific patterns of practicum satisfaction, particularly in relation to supervision, practicum environment, and overall satisfaction. Additional analyses of practicum-related variables also showed significant differences in student teachers' satisfaction. Student teachers whose placements were arranged by the university reported higher overall satisfaction than those who found placements by themselves or through family members, relatives, or teachers. Students placed in government-run kindergartens also reported higher satisfaction than those placed in private kindergartens or other educational institutions. These results suggest that placement arrangement and practicum institution type were also associated with differences in practicum satisfaction.

3.4. Findings from the interviews

3.4.1. Overall practicum satisfaction

The interview findings indicated that practicum satisfaction was moderate rather than ideal and varied across different dimensions, with university-based supervision emerging as the weakest aspect. These findings further substantiate the definition of practicum satisfaction as a subjective evaluation shaped by the relationship between prior expectations and actual practicum experiences. Student teachers in early childhood education generally acknowledged the role of the teaching practicum in promoting pre-service teacher development, believing it facilitated the acquisition of practical skills. However, despite recognizing the necessity of practicum programs, they reported relatively low levels of satisfaction with their practicum experiences. Additionally, the interview results reflected a shared consensus across genders on this issue, which aligns with the quantitative findings. As some participants noted:

> "*...The original purpose of the practicum was to help us understand the daily routines in kindergartens, to engage with children and classrooms, and to develop the abilities needed to become future kindergarten teachers. However, we encountered many difficulties in kindergartens that differed from our psychological expectations. For example, when children in lower grades cry and make noise, it can sometimes be overwhelming, which is quite different from what is taught in textbooks ...*" (Interview ID: Z-L-250709)
>
> "*As a male student, I had to take on more work during my practicum in the kindergarten. Although I had some psychological preparation, I was still shocked by the amount of work I needed to undertake. I was mainly responsible for children's physical training, carrying heavy objects that female students were not suitable to carry, and even climbing high places to repair electrical equipment and printers... There is still much room for improvement in the practicum.*" (Interview ID: S-P-250611)

3.4.2. Influencing factors of practicum satisfaction

As a crucial component of China's higher education system, normal universities have witnessed a rapid increase in student enrollment, resulting in a decline in the standardization and quality of practicum arrangements and supervision. Students reported the lowest levels of satisfaction regarding guidance from university teachers during their practicum, which emerged as the most frequently mentioned issue in the interviews. This finding aligns with the quantitative results, which indicate the lowest scores for support from university teachers.

> "*I feel that the university does place importance on our practicum and contacted the practicum units in advance. However, with so many students, it is impossible to take care of everyone. Each of us was given a practicum handbook, but as you know, the guidance from supervising teachers was very limited. During the entire practicum, I only met my supervisor twice ...*" (Interview ID: Z-L-250601)

Gender differences are also evident in practicum satisfaction. The kindergarten teaching profession in China exhibits a significant gender imbalance, with male kindergarten teachers constituting only approximately 2% of the workforce [45]. Although male student teachers are generally welcomed by kindergarten administrators and frequently assigned a wider range of practicum tasks, the heightened cultural expectations placed on men in Chinese society lead to greater caution when contemplating kindergarten teaching as a long-term career option.

> "*I did not work as a classroom teacher during my practicum, but rather served as an assistant to the principal, responsible for logistics and the daily operation of the kindergarten. The kindergarten (principal) had high expectations of me and hoped that I would continue working in early childhood education, even offering me employment opportunities in advance. However, I am still worried about my future development. Even if the salary is higher, it will not be much higher, and I will likely become the main breadwinner of my family...*" (Interview ID: W-M-250712)

Interview data further indicated that satisfaction with the practicum was associated with participants' perceptions of teaching as a career. Teaching is typically regarded as a moderately paid yet relatively stable profession in China and many developing countries [46]. Additionally, variations in practicum satisfaction were noted among student teachers from diverse residential backgrounds. Specifically, those hailing from rural areas exhibited a greater desire for personal growth, a deeper passion for early childhood education, and a stronger commitment to pursuing a career in teaching.

> "*I come from the Dabie Mountain area of Anhui. It takes three hours to get from my home to the county town. Education is the only way to change my destiny, so I need to acquire as many skills as possible during the practicum... I am not afraid of hardship. Rural children like us have to make greater efforts to stand on the same starting line as our peers from cities. We cannot afford to fail.*" (Interview ID: S-P-250609)

3.4.3. Changes in practicum satisfaction

Practicum satisfaction exhibited an initial decline, followed by a gradual recovery throughout the duration of the practicum. The first week at the practicum site represented a critical adjustment period for student teachers, encompassing adaptation to living conditions, practicum management, and the content of the practicum. As they navigated these challenges and demands, student teachers progressively enhanced their competencies in educational practice.

> "*When I first arrived at the practicum kindergarten, the crowded living conditions were overwhelming. I even began to doubt the practicum program, and this sense of discomfort lasted for about a week. Gradually, as I saw the children's lovely faces and watched them happily play during my teaching activities, I began to adapt to the process*." (Interview ID: W-M-250712)
> "*The practicum is an important stage in my student life. We are like characters in a game, constantly overcoming teaching difficulties, communication challenges, and psychological discomfort. We keep growing stronger and eventually become qualified kindergarten teachers... Overall, I am quite satisfied with the practicum, although there is still much room for improvement at the university level.*" (Interview ID: L-W-250620)

The qualitative interview results indicate that variations in practicum satisfaction are closely linked to the coordination among different support systems throughout the practicum process. Universities primarily handle pre-practicum arrangements, coordination, and the placement of students into practicum positions, whereas practicum kindergartens take on a more significant role in supervising student teachers once they have entered the kindergarten. This observation is consistent with the quantitative findings, which reveal that student teachers reported lower satisfaction with university support systems and higher satisfaction with kindergarten support systems.

> "*The university's arrangements were fairly reasonable, but during the practicum we received relatively little support and management from the university. Most issues were addressed through communication with the practicum kindergarten. Our Principal Huang cared deeply about us, helping us adapt to both daily life and classroom work, just like a family member. We truly felt warmth and support.*" (Interview ID: S-P-250623)

3.5. Discussion

The findings of this study are substantiated by convergent evidence from two sources: quantitative survey data collected from 287 student teachers and qualitative focus group data obtained from 15 participants. Within the explanatory sequential mixed-methods design, the qualitative findings were employed to elucidate and contextualize the quantitative patterns, rather than serving as an independent parallel set of results [36]. This integration enhances the interpretation of the findings by illustrating not only which dimensions and groups exhibited differences in practicum satisfaction, but also elucidating the reasons behind these differences within the practicum context. Previous studies have frequently approached practicum satisfaction through either quantitative measurements or qualitative descriptions; however, the present study bridges group differences with student teachers' explanations regarding supervision, institutional support, background characteristics, and practicum adaptation. The theoretical novelty of this study resides in conceptualizing practicum satisfaction as a multidimensional, context-sensitive, and process-dependent construct, rather than merely as a singular endpoint evaluation. The empirical novelty is demonstrated through the use of explanatory sequential mixed-methods evidence, which illustrates how university supervision, practicum-school support, student background, and stage-specific adaptation collectively influence satisfaction. The practical implication is that practicum support should be structured as a continuous and differentiated process involving both universities and practicum schools, rather than being treated as a one-time placement arrangement.

First, the findings indicate that practicum satisfaction among student teachers in early childhood education remains at a moderate level, suggesting that while the practicum experience is meaningful, it does not achieve full satisfaction. This result aligns broadly with previous studies that demonstrate internship satisfaction is influenced by factors such as institutional support, supervision quality, learning opportunities, and organizational arrangements [47], [48]. However, this study further reveals that satisfaction varies across different dimensions. Student teachers rated practicum content and school-based organizational support more positively, while university-based supervision received the lowest ratings. This discrepancy may be attributed to the differing roles of universities and practicum schools throughout the practicum process. Universities tend to focus more on pre-practicum placement preparation and administrative coordination, whereas practicum schools offer immediate mentoring, emotional support, and feedback related to classroom experiences once student teachers begin their placements in kindergartens. This distinction helps clarify why school-based support is perceived more favorably than university-based supervision. Theoretically, this finding suggests that practicum satisfaction should be viewed as a multidimensional assessment of various support systems rather than a singular evaluation of the practicum experience as a whole. Practically, this underscores the necessity for universities to transcend a placement-oriented model and implement continuous, visible, and pedagogically meaningful supervision throughout the practicum period to enhance practicum quality.

Second, the observed differences across demographic and practicum-related variables indicate that practicum satisfaction is influenced not only by institutional arrangements but also by student teachers' social backgrounds and professional expectations. This finding extends previous research by demonstrating that similar practicum arrangements may be interpreted differently by various groups of student teachers. Rural student teachers reported relatively higher satisfaction, likely due to stronger expectations of occupational mobility, greater tolerance for challenging practicum conditions, and a more development-oriented understanding of practicum opportunities. In contrast, urban student teachers may assess the same practicum conditions against elevated expectations regarding supervision quality, living conditions, and institutional support. Gender differences also necessitate contextual interpretation. Within the gendered context of early childhood education, male student teachers may attract more attention from practicum schools and be assigned a broader range of responsibilities, which can enhance their sense of task involvement and recognition within the school. However, these experiences may also heighten their awareness of role ambiguity, unequal expectations, and uncertainty regarding long-term career commitment. This interpretation aligns with studies indicating that gender expectations and social norms significantly influence educational and professional experiences [49], and that social and cultural capital can shape career opportunities and development [50]. Consequently, practicum satisfaction should not be viewed as a uniform response to standardized practicum arrangements; rather, it should be understood as an evaluation shaped by the interaction between institutional provisions and individual interpretations.

Third, the qualitative findings indicate that practicum satisfaction is dynamic and process-dependent rather than fixed. Student teachers' satisfaction tends to decline at the beginning of the practicum but gradually recovers as they adapt to the practicum site. This pattern may arise because the early stages of the practicum require students to adjust to living arrangements, workload, classroom routines, emotional pressures, and unfamiliar professional expectations simultaneously. As students become more familiar with kindergarten routines and receive support from practicum school teachers, their sense of competence and

emotional stability gradually improves. This finding aligns with longitudinal research indicating that satisfaction changes in conjunction with adaptation and learning processes [51]. Furthermore, it extends previous research by demonstrating that practicum satisfaction in early childhood teacher education is closely related to the timing and quality of support. Theoretically, this suggests that practicum satisfaction should not be viewed solely as an endpoint outcome measured after the practicum, but as a dynamic judgment shaped by ongoing encounters with institutional demands and professional challenges. Practically, support should be organized in stages: at the entry stage, student teachers require clearer organizational guidance and realistic expectation-setting; during the adaptation stage, emotional reassurance and mentor responsiveness are particularly important; and in the later stage, reflective dialogue and developmental feedback are necessary to consolidate professional learning. This is also consistent with research highlighting the importance of reflective practice and noticing skills in enhancing practicum experiences [52].

Finally, the findings provide several practical implications for enhancing practicum design and support. The consistently low scores for university-based supervision indicate a need for universities to strengthen pre-practicum preparation, increase supervisory contact during the practicum, and establish clearer follow-up mechanisms. Previous research has identified similar challenges in supervision and support, underscoring the necessity for more flexible and responsive supervision models [53]. Furthermore, the variations across demographic and practicum-related variables suggest that support systems should not be uniformly applied to all student teachers. It is essential for universities and practicum schools to collaborate in developing tiered and context-sensitive support arrangements that address the diverse backgrounds, placement conditions, and stage-specific needs of student teachers. Such arrangements may enhance practicum satisfaction and contribute to the overall quality of teacher preparation. Prior research has demonstrated that practicum and internship experiences are closely linked to professional identity, career commitment, and career development [29], [54]. Well-designed practicum experiences can also foster student teachers' professional relationships, teaching practices, personal and professional skill development, and understanding of early childhood education settings [55]. Therefore, the practical value of improving practicum satisfaction extends beyond enhancing students' immediate experiences; it also supports their long-term professional development as future early childhood educators.

4. CONCLUSION

This study investigates practicum satisfaction and its influencing factors among student teachers majoring in early childhood education within the Chinese context. In addressing the first research question, the findings indicate that overall practicum satisfaction is moderate rather than high, with higher satisfaction reported in practicum content and school-based support, while the lowest satisfaction pertains to supervision by university teachers. Regarding the second research question, significant differences were identified based on gender, household registration, practicum institution type, practicum arrangement mode, and selected practicum conditions, suggesting that practicum satisfaction is influenced by both institutional provisions and the background characteristics of student teachers. In relation to the third research question, qualitative findings reveal that student teachers' satisfaction evolves throughout the practicum process as they adapt to workplace demands, institutional culture, emotional pressures, and professional responsibilities.

These findings suggest that practicum satisfaction should be understood as a multidimensional, context-sensitive, and process-dependent indicator of teacher preparation quality, rather than as a singular end-point evaluation. Practically, universities should transcend mere placement arrangements and provide continuous supervision, timely feedback, and clearer follow-up mechanisms throughout the practicum period. Practicum schools should offer structured mentoring, appropriate task allocation, emotional support during the initial adaptation phase, and opportunities for reflective professional learning. Furthermore, universities and practicum schools should establish closer coordination mechanisms and provide differentiated support for student teachers from diverse backgrounds and placement contexts. The study is limited by its single-university sample and its focus on group differences rather than causal relationships; therefore, future research should incorporate broader samples, longitudinal data, and more complex explanatory models.

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AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Li Bin	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			
Loy Chee Luen	✓	✓		✓			✓	✓		✓		✓	✓	✓

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

ETHICAL APPROVAL

This study was conducted in strict accordance with ethical guidelines and data protection laws; all interviewee information has been anonymized. We obtained research approval from the local education administration department of Shucheng Vocational School in Anhui Province, designated as Lu'an City Vocational and Adult Education Research No. 2024-23.

DATA AVAILABILITY

The data that support the findings of this study are available on request from the corresponding author, [LCL]. The data, which contain information that could compromise the privacy of research participants, are not publicly available due to certain restrictions.

REFERENCES

[1] Y. Su, N. Rao, J. Sun, and L. Zhang, "Preschool quality and child development in China," *Early Childhood Research Quarterly*, vol. 56, pp. 15–26, 2021, doi: 10.1016/j.ecresq.2021.02.003.

[2] P. Nilsson and A. M. Cederqvist, "Building teacher knowledge and identity-career changers' transition into teaching through a short teacher education programme," *European Journal of Teacher Education*, vol. 48, no. 1, pp. 132–152, Jan. 2025, doi: 10.1080/02619768.2024.2432406.

[3] G. B. Gudmundsdottir and O. E. Hatlevik, "Newly qualified teachers' professional digital competence: implications for teacher education," *European Journal of Teacher Education*, vol. 41, no. 2, pp. 214–231, Mar. 2018, doi: 10.1080/02619768.2017.1416085.

[4] Z. Shanshan, S. Yanlin, and L. C. Luen, "Robust emotion recognition for complex environments: ChildEmoNet model based on DETR-ResNet50 cascaded architecture," *PLoS ONE*, vol. 20, no. 9, p. e0332130, Sep. 2025, doi: 10.1371/journal.pone.0332130.

[5] M. J. Smith, K. H. Burr, and L. A. Dean, "(Supervised) practice makes progress: student meaning making and development through internship experiences," *Journal of Student Affairs Research and Practice*, vol. 62, no. 1, pp. 1–12, Jan. 2025, doi: 10.1080/19496591.2024.2393082.

[6] L. Shen, W. Cui, and R. Wang, "Exploring the longitudinal impact of self-efficacy and self-directed learning on the development of pre-service teachers during educational internships," *Asia-Pacific Education Researcher*, vol. 34, no. 6, pp. 2045–2056, Dec. 2025, doi: 10.1007/s40299-025-01013-w.

[7] T. Adams, B. Koster, and P. den Brok, "Patterns in student teachers' learning processes and outcomes of classroom management during their internship," *Teaching and Teacher Education*, vol. 120, p. 103891, Dec. 2022, doi: 10.1016/j.tate.2022.103891.

[8] D. E. Salinas-Navarro, A. C. Da Silva-Ovando, and J. A. Palma-Mendoza, "Experiential learning labs for the post-COVID-19 pandemic era," *Education Sciences*, vol. 14, no. 7, p. 707, Jun. 2024, doi: 10.3390/educsci14070707.

[9] M. K. Kabilan, "A phenomenological study of an international teaching practicum: pre-service teachers' experiences of professional development," *Teaching and Teacher Education*, vol. 36, pp. 198–209, Nov. 2013, doi: 10.1016/j.tate.2013.07.013.

[10] S. Fernandes, A. M. Araújo, I. Miguel, and M. Abelha, "Teacher professional development in higher education: the impact of pedagogical training perceived by teachers," *Education Sciences*, vol. 13, no. 3, p. 309, Mar. 2023, doi: 10.3390/educsci13030309.

[11] S. N. Mhuirí, D. Kelly, E. Owens, and F. Howard, "Ethical considerations in teacher reflection and research," *Irish Educational Studies*, pp. 1–22, Mar. 2025, doi: 10.1080/03323315.2025.2479437.

[12] L. Xu, A. Hinds, A. Rakisheva, N. El Souefi, and A. Witt, "Beyond borders: virtual global engagement in teacher education," *Teaching and Teacher Education*, vol. 165, p. 105133, Oct. 2025, doi: 10.1016/j.tate.2025.105133.

[13] R. Yuan, W. Liu, and I. Lee, "Confrontation, negotiation and agency: exploring the inner dynamics of student teacher identity transformation during teaching practicum," *Teachers and Teaching: Theory and Practice*, vol. 25, no. 8, pp. 972–993, Nov. 2019, doi: 10.1080/13540602.2019.1688286.
[14] C. Kristoff, S. C. Hill, Y. Nakai, and H. Daugherty, "Do you see what I see? Examining college internships from both the intern and supervisor perspectives," *Journal of Experiential Education*, vol. 48, no. 2, pp. 289–309, 2025, doi: 10.1177/10538259241279765.
[15] H. Zengxia, G. Qiaoping, Z. Ying, and L. Xinghui, "Enhancing student satisfaction with the practical relevance of teacher training for early childhood preservice educators in China," *SAGE Open*, vol. 15, no. 2, pp. 1–21, 2025, doi: 10.1177/21582440251351343.
[16] R. Q. G. Rashed, A. A. Abubakar, O. Madani, and Y. H. Al-Mamary, "Enhancing student engagement and motivation for sustainable education: the role of internship and institutional support," *Sustainability*, vol. 17, no. 12, p. 5291, Jun. 2025, doi: 10.3390/su17125291.
[17] H. Polat and M. Tan, "Assessing intern students' professional commitment and perspectives on graduate education," *Journal of Education and Research in Nursing*, vol. 22, no. 2, pp. 110–115, 2025, doi: 10.14744/jern.2025.29567.
[18] B. P. García-Noblejas, M. L. Barceló-Cerdá, I. Rodríguez-Gómez, and E. López-Gómez, "Exploring student teacher perceptions on the benefits of the teaching practicum," *Journal of New Approaches in Educational Research*, vol. 12, no. 2, pp. 242–257, Jul. 2023, doi: 10.7821/naer.2023.7.1384.
[19] H. Seyri and M. Nazari, "From practicum to the second year of teaching: examining novice teacher identity reconstruction," *Cambridge Journal of Education*, vol. 53, no. 1, pp. 43–62, Jan. 2022, doi: 10.1080/0305764X.2022.2069227.
[20] C. Yan, "How do vocational students evaluate vocational education internships-an evaluation scale development in China," *Education and Training*, vol. 67, no. 1, pp. 90–106, Jan. 2025, doi: 10.1108/ET-08-2023-0320.
[21] L. Zhang, Y. Chen, W. Zhong, and L. Jiang, "Becoming a teacher, coexisting with emotions: a follow-up study on emotion regulation of ECE student teachers in teaching internship context in China," *Asia-Pacific Education Researcher*, vol. 35, no. 1, pp. 143–158, Feb. 2026, doi: 10.1007/s40299-025-00992-0.
[22] M. Haddad-Adaimi, R. A. Z. Daou, and Y. Ducq, "Internship assessment and evaluation in higher education," *International Journal on Integrating Technology in Education*, vol. 11, no. 1, pp. 17–33, Mar. 2022, doi: 10.5121/ijite.2022.11102.
[23] Y. Wolinsky-Nahmias and A. H. Auerbach, "Evaluating the design and benefits of internship programs," *Journal of Political Science Education*, vol. 18, no. 4, pp. 584–604, Oct. 2022, doi: 10.1080/15512169.2022.2109481.
[24] C. Niu, S. Liao, and Y. Sun, "African students' satisfaction in China: from the perspectives of China-Africa educational cooperation," *Journal of Studies in International Education*, vol. 27, no. 2, pp. 298–315, 2023, doi: 10.1177/10283153211052771.
[25] K. Zhao, J. Huang, and S. Duangekanong, "Factors influencing satisfaction on internship of art normal students in Sichuan, China," *Asia Social Issues*, vol. 15, no. 6, p. 256979, Aug. 2022, doi: 10.48048/asi.2022.256979.
[26] M. T. Hora, Z. Chen, M. Wolfgram, J. Zhang, and J. J. Fischer, "Designing effective internships: a mixed-methods exploration of the sociocultural aspects of intern satisfaction and development," *Journal of Higher Education*, vol. 95, no. 5, pp. 579–606, Jul. 2024, doi: 10.1080/00221546.2023.2241330.
[27] J. R. Schneider *et al.*, "Creating better internships by understanding mentor challenges: findings from a series of focus groups," *International Journal of STEM Education*, vol. 11, no. 1, p. 60, Dec. 2024, doi: 10.1186/s40594-024-00518-y.
[28] O. Mamani-Benito, R. F. C. Esteban, R. Castillo-Blanco, T. Caycho-Rodriguez, M. Tito-Betancur, and R. Farfán-Solís, "Anxiety and depression as predictors of life satisfaction during pre-professional health internships in COVID-19 times: the mediating role of psychological well-being," *Heliyon*, vol. 8, no. 10, p. e11025, Oct. 2022, doi: 10.1016/j.heliyon.2022.e11025.
[29] Z. Cai, J. Zhu, and S. Tian, "Preservice teachers' teaching internship affects professional identity: self-efficacy and learning engagement as mediators," *Frontiers in Psychology*, vol. 13, p. 1070763, Nov. 2022, doi: 10.3389/fpsyg.2022.1070763.
[30] C. Wang and F. Li, "How does internship 'empower' professional master's students: based on the survey of graduate student satisfaction," (in Chinese), *China Higher Education Research*, vol. 37, no. 10, pp. 81–87, 2021, doi: 10.16298/j.cnki.1004-3667.2021.10.12.
[31] Y. Yang and Y. Chen, "Mentoring for motivation: supporting student teachers' basic psychological needs in Chinese public kindergarten internships," *Frontiers in Psychology*, vol. 16, p. 1676131, Sep. 2025, doi: 10.3389/fpsyg.2025.1676131.
[32] B. Y. Hu, Y. Su, X. Liu, M. He, and J. LoCasale-Crouch, "Examining coaching skill development during preservice teachers' (PSTs) internships," *Early Childhood Education Journal*, vol. 51, no. 5, pp. 939–953, Jun. 2023, doi: 10.1007/s10643-022-01352-z.
[33] H. Jiadi and A. N. bin Md. Nasir, "Exploring the challenges and opportunities in cultivating vocational competence among preschool education students in Chinese higher vocational colleges: a comparative study of policy texts and industry needs," *International Journal of Academic Research in Progressive Education and Development*, vol. 14, no. 4, pp. 2124–2142, Dec. 2025, doi: 10.6007/ijarped/v14-i4/26916.
[34] L. Zhang, "Exploring interactive pedagogy to enhance students' engagement in ECE in Southwest China," *The Scholar: Human Sciences*, vol. 17, no. 2, pp. 67–79, 2025, doi: 10.14456/SHSERJ.2025.37.
[35] S. Xie, S. Chen, X. Wang, Y. Yang, and H. Yang, "Internship experience and vocational exploration and commitment of pre-service early childhood education teachers from low-resource areas in China," *Journal of Early Childhood Teacher Education*, pp. 1–17, Oct. 2025, doi: 10.1080/10901027.2025.2582785.
[36] M. D. Fetters, L. A. Curry, and J. W. Creswell, "Achieving integration in mixed methods designs-principles and practices," *Health Services Research*, vol. 48, no. 6, pp. 2134–2156, Dec. 2013, doi: 10.1111/1475-6773.12117.
[37] J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, *Multivariate data analysis*, 8th ed. Hampshire, U.K.: Cengage Learning, 2019.
[38] A. C. K. Cheung, K. L. Wong, H. F. Wang, and J. B. Dai, "Effect of a student teaching internship program on the self-efficacy of pre-service teachers in rural China," *International Journal of Educational Management*, vol. 37, no. 2, pp. 373–392, Mar. 2023, doi: 10.1108/IJEM-03-2021-0081.
[39] L. Shen, C. L. Loy, Z. Wang, and J. Gao, "Effectiveness of group counselling on psychological capital intervention for kindergarten teachers in rural China," *Cogent Education*, vol. 11, no. 1, p. 2379729, Dec. 2024, doi: 10.1080/2331186X.2024.2379729.
[40] W. M. To and J. W. Y. Lung, "Factors influencing internship satisfaction among Chinese students," *Education + Training*, vol. 62, no. 5, pp. 543–558, Jul. 2020, doi: 10.1108/ET-01-2020-0023.
[41] Ş. Çalış, E. Tan, S. D. Maç, and Ş. A. Turan, "A critique of the internship measurement scales in higher education," *Educational Research Review*, vol. 37, p. 100491, Nov. 2022, doi: 10.1016/j.edurev.2022.100491.
[42] P. A. Edelsbrunner, B. A. Simonsmeier, and M. Schneider, "The Cronbach's alpha of domain-specific knowledge tests before and after learning: A meta-analysis of published studies," *Educational Psychology Review*, vol. 37, no. 1, pp. 1–43, Mar. 2025, doi: 10.1007/s10648-024-09982-y.
[43] H. Luo, Y. Lie, and F. W. Prinzen, "Surveillance of COVID-19 in the general population using an online questionnaire: report from 18,161 respondents in China," *JMIR Public Health and Surveillance*, vol. 6, no. 2, p. e18576, Apr. 2020, doi: 10.2196/18576.

[44] N. Kholifah, I. Kusumawaty, M. Nurtanto, F. Mutohhari, F. D. Isnantyo, and H. Subakti, "Designing the structural model of students' entrepreneurial personality in vocational education: an empirical study in Indonesia," *Journal of Technical Education and Training*, vol. 14, no. 3, pp. 1–17, 2022, doi: 10.30880/jtet.2022.14.03.001.
[45] S. Zhang, W. Huang, and H. Li, "Perceived organizational support and occupational commitment: a study among male kindergarten teachers," *Heliyon*, vol. 9, no. 9, p. e20369, 2023, doi: 10.1016/j.heliyon.2023.e20369.
[46] Q. Y. Yang, W. T. Zhou, and R. Wang, "The influence of professional identity on job satisfaction of post-internship teacher trainees: The mediating role of career maturity," (in Chinese), *Journal of Anshan Normal University*, vol. 27, no. 2, pp. 85–88, 2025, doi: 10.20212/j.issn.1008-2441.2025.02.016.
[47] O. T. Adeosun, A. I. Shittu, and T. J. Owolabi, "University internship systems and preparation of young people for world of work in the 4th industrial revolution," *Rajagiri Management Journal*, vol. 16, no. 2, pp. 164–179, Jun. 2022, doi: 10.1108/ramj-01-2021-0005.
[48] Y. Feng, Z. Zhang, X. Zeng, and Y. Liu, "The influence of internship satisfaction and the psychological contract on the career identity behavior of fresh graduates," *Frontiers in Psychology*, vol. 14, p. 1294799, Dec. 2023, doi: 10.3389/fpsyg.2023.1294799.
[49] F. Santoniccolo, T. Trombetta, M. N. Paradiso, and L. Rollè, "Gender and media representations: a review of the literature on gender stereotypes, objectification and sexualization," *International Journal of Environmental Research and Public Health*, vol. 20, no. 10, p. 5770, May 2023, doi: 10.3390/ijerph20105770.
[50] D. Bridges, L. Bamberry, E. Wulff, and B. Krivokapic-Skoko, "'A trade of one's own': the role of social and cultural capital in the success of women in male-dominated occupations," *Gender, Work and Organization*, vol. 29, no. 2, pp. 371–387, Mar. 2022, doi: 10.1111/gwao.12764.
[51] A. Scheunemann, T. Schnettler, J. Bobe, S. Fries, and C. Grunschel, "A longitudinal analysis of the reciprocal relationship between academic procrastination, study satisfaction, and dropout intentions in higher education," *European Journal of Psychology of Education*, vol. 37, no. 4, pp. 1141–1164, Dec. 2022, doi: 10.1007/s10212-021-00571-z.
[52] F. Romo-Escudero, J. LoCasale-Crouch, and B. K. Hamre, "Early childhood teachers' noticing skills in the context of an intervention: supporting teachers to effectively reflect on practice," *Teacher Development*, vol. 26, no. 5, pp. 683–705, Oct. 2022, doi: 10.1080/13664530.2022.2122546.
[53] R. Egan, C. David, and J. Williams, "An off-site supervision model of field education practice: innovating while remaining rigorous in a shifting field education context," *Australian Social Work*, vol. 76, no. 4, pp. 520–533, Oct. 2023, doi: 10.1080/0312407X.2021.1898004.
[54] B. A. Dean *et al.*, "Career development learning in the curriculum: what is an academic's role?" *Journal of Teaching and Learning for Graduate Employability*, vol. 13, no. 1, pp. 142–154, Nov. 2022, doi: 10.21153/JTLGE2022VOL13NO1ART1539.
[55] D. M. Cretu, "Practicum in early childhood education: student teachers' perspectives," *Revista Romaneasca pentru Educatie Multidimensionala*, vol. 13, no. 1, pp. 261–278, May 2021, doi: 10.18662/rrem/13.1sup1/395.

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