



Analyzing Tutor–Student Communication Patterns on WhatsApp for Educational Engagement in Higher Education

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Abstract

This study investigated the communication patterns that emerge when tutors and students interact via WhatsApp at a South African university. Guided by Computer-Mediated Communication (CMC) theory, the study aimed to explore how WhatsApp mediates tutor-student communication and influences academic engagement within a digitally evolving higher education environment. Despite WhatsApp's growing use for academic purposes, limited research has critically examined the nuanced patterns of communication that arise, particularly within under-resourced institutions in South Africa. The study adopted a qualitative approach, framed within an interpretivist paradigm, and employed a case study design. A total of thirty tutors were purposefully selected to participate in semi-structured interviews and to submit anonymised WhatsApp chat excerpts that illustrated their interactions with students. The data was analysed using thematic analysis, allowing for the identification of recurring communication behaviours and patterns. Four dominant themes emerged: relational warmth, which includes expressions of care and encouragement; instructional responsiveness, reflecting timely academic feedback and clarification; digital etiquette challenges, such as inappropriate language or lack of response; and communication breakdowns resulting from misinterpretation or information overload. These findings highlight both the benefits and limitations of WhatsApp as a tool for academic support. The study concluded that WhatsApp has the potential to enhance academic dialogue and emotional connection, but its effectiveness depends on clear communication norms and institutional guidance. It recommends that universities provide training and structured guidelines to help tutors navigate digital communication effectively, ensuring more consistent and meaningful engagement with students.

Keywords: WhatsApp, communication patterns, tutors, students, digital pedagogy, computer-mediated communication, higher education

Introduction

In a rapidly digitising higher education landscape, the nature of tutor–student communication has undergone a substantial transformation. Traditional face-to-face engagement is increasingly complemented by digital platforms, particularly in contexts where large enrolments and limited institutional resources constrain personalised academic support. Tutors, who serve as intermediaries between students and formal academic content, play a crucial role in clarifying concepts, sustaining motivation, and promoting engagement (Chigona, 2019). As demands on tutors intensify,

both tutors and students have turned to mobile communication tools to bridge gaps created by limited contact time and infrastructural challenges. Among these tools, WhatsApp has gained prominence due to its affordability, accessibility, and widespread adoption (Jantjies & Joy, 2019).

Originally designed as a social messaging application, WhatsApp has evolved into a versatile platform for academic communication. Its multimodal features enable the exchange of course materials, clarification of content, and timely reminders, while also allowing for expressions of encouragement and support (Barhoumi, 2021). These capabilities extend learning beyond formal spaces and facilitate continuous interaction.

Despite its widespread use in higher education, however, little is known about the specific communicative practices that emerge when tutors and students interact through WhatsApp. Much of the existing research focuses broadly on digital platforms or privileges student perspectives, offering limited insight into the communicative strategies tutors employ and the challenges they encounter (Kumi-Yeboah et al., 2020).

Tutors often navigate complex communicative demands shaped by linguistic diversity, socio-cultural variation, and uneven digital literacies. WhatsApp introduces additional challenges, including ambiguous tone, delayed responses, blurred relational boundaries, and inconsistent digital etiquette (Maringe & Sing, 2022; Maphosa & Ndamba, 2021). In the absence of structured institutional guidance, tutors may struggle to maintain professionalism, manage expectations, or provide consistent support. Understanding how communication unfolds in this environment therefore requires attention to the relational, emotional, and instructional dynamics embedded in digitally mediated exchanges.

Moreover, scholarship on digital communication in African higher education contexts frequently overlooks the socio-cultural nuances that shape interactions. Practices perceived as informal or inappropriate in one setting may be culturally resonant in another, particularly in multilingual and resource-diverse institutions. Exploring how tutors interpret and manage these dynamics provides an opportunity to reconsider tutor preparation and to recognise digital communication as a core pedagogical competency within contemporary higher education (Robson & Selwyn, 2020).

Despite the growing use of WhatsApp for academic communication, there is limited empirical research examining the communication patterns that emerge specifically between tutors and students, particularly from the tutors' perspectives and within the socio-cultural realities of South African universities. Existing studies do not adequately address how relational, instructional, and emotional dimensions of communication are negotiated on WhatsApp, nor how tutors adapt to the platform's affordances and

constraints. This study addresses this gap by analysing tutor-reported interactions and experiences to provide a nuanced account of how WhatsApp mediates academic engagement in an under-resourced higher education context.

Study objectives

The objective of this study was to explore the communication patterns that emerged when tutors and students interacted via WhatsApp, focusing on how the platform shaped academic dialogue, emotional support, and instructional delivery in an under-resourced South African university context.

Significance of the study

This study contributes to a deeper understanding of how mobile communication platforms shape academic engagement in under-resourced higher education contexts. By foregrounding tutors' experiences, it addresses a critical gap in existing literature and provides empirically grounded insights into the communicative practices that emerge on WhatsApp.

The findings offer practical implications for institutions seeking to optimise digital communication as part of tutor training and student support. Understanding how relational warmth, instructional responsiveness, and digital etiquette challenges unfold in WhatsApp interactions equips universities to design clearer communication guidelines, strengthen tutor preparation, and promote more consistent and culturally responsive digital engagement. The study therefore advances both theoretical and practical discussions on digital pedagogy, particularly within resource-constrained environments where mobile platforms remain central to academic support.

Problem statement

Despite WhatsApp's widespread use for academic communication in South African universities, little is known about the specific communication patterns that shape tutor–student interactions on this platform. Existing studies have largely neglected tutors' perspectives, leaving a critical gap in understanding how socio-cultural,

linguistic, and technological dynamics influence digitally mediated academic support. This lack of nuanced knowledge limits institutions' ability to develop evidence-based guidelines that ensure effective, professional, and pedagogically sound communication in resource-constrained learning environments.

Literature review

Theoretical Framework: Computer-Mediated Communication (CMC) Theory

Computer-Mediated Communication (CMC) theory provides the conceptual foundation for this study by offering a lens through which digitally mediated interpersonal interaction can be analysed. Originating in early work by Walther (1992) and subsequent development in the Social Information Processing (SIP) and Hyperpersonal models (Walther, 1996), CMC theory has evolved substantially alongside rapid technological change. Whereas classical CMC research was grounded in text-based, asynchronous platforms such as email and discussion boards, contemporary scholarship recognises that mobile messaging applications characterised by multimodality, constant connectivity, and socially embedded use extend the scope and complexity of mediated communication. Within this expanded paradigm, platforms such as WhatsApp are understood as dynamic socio-technical environments that blend synchronous and asynchronous affordances, enabling users to construct relational meaning through features such as emojis, voice notes, typing indicators, and read receipts.

This theoretical lineage positions WhatsApp as more than a utilitarian communication channel. Instead, it operates as a contextually situated medium through which tone, authority, emotional support, and instructional intent are negotiated in real time. CMC theory, therefore, provides a robust framework for analysing how tutors and students adapt their communicative practices to compensate for reduced non-verbal cues, manage conversational ambiguity, and construct interpersonal warmth or distance in digitally mediated learning spaces.

Although CMC theory forms the primary analytical lens, complementary theoretical perspectives further illuminate the communicative dynamics at play. Social Presence Theory, for example, highlights the extent to which users perceive one another as “real” within mediated environments, offering insight into how relational warmth or immediacy is conveyed through WhatsApp’s multimodal features. Similarly, Media Richness Theory (Daft & Lengel, 1986) provides a useful contrast by suggesting that the effectiveness of a medium depends on its capacity to transmit nuanced information, an issue that becomes salient when tutors navigate misinterpretation, instructional complexity, or information overload in mobile-based communication. While these frameworks contribute valuable conceptual texture, CMC theory remains the most appropriate and overarching lens because it directly addresses the adaptive, relational, and evolving nature of digital communication in contemporary educational contexts.

WhatsApp in Higher Education

In recent years, WhatsApp has become deeply embedded in higher education across the Global South, serving as a low-cost, accessible platform for academic engagement. Its low data consumption, cross-device compatibility, and ease of use make it particularly suitable for contexts characterised by uneven internet access and limited institutional resources (Jantjies & Joy, 2019; Ndlovu, 2023). Mobile and ubiquitous technologies are increasingly recognised as tools to reconfigure pedagogical spaces, making them more responsive, relational, and student-centred (Ng’ambi & Bozalek, 2019; Adeyemi & Banda, 2024). WhatsApp allows tutors to extend learning into students’ lived environments, creating hybrid academic spaces where support, clarification, and even motivation can happen asynchronously and informally.

WhatsApp facilitates both vertical (tutor-to-student) and horizontal (peer-to-peer) communication, supporting collaborative learning and scaffolding in ways that are culturally and contextually sensitive (Chigona, 2019; Nonyelum & Adebisi, 2023). Its multimodal features, voice

notes, emojis, image and video sharing compensate for the absence of physical cues, enriching communication and relational closeness (Barhoumi, 2021; Musa & Dube, 2025). However, these same features blur boundaries between academic and personal exchanges, raising concerns about tone, timing, and appropriateness (Maphosa & Ndamba, 2021; Adeyemi & Banda, 2024). During the COVID-19 pandemic, WhatsApp proved instrumental in sustaining academic continuity and providing psychosocial support, demonstrating the platform's adaptability and highlighting the urgent need for institutional frameworks to guide its use (Nonyelum & Adebisi, 2021; Khumalo & Ndlovu, 2023). This emergency-driven uptake brought to light not only the adaptability of the tool but also the urgent need for institutional frameworks to support its use. Despite this, WhatsApp remains largely outside formal learning management strategies, often seen as supplementary or informal, a perception that belies its growing centrality to students' academic lives (Robson & Selwyn, 2020).

The relational dimension of WhatsApp use cannot be overstated. Tutors often find themselves performing emotional labor via the platform, responding to students' anxieties, academic stress, or even family-related challenges (Maringe & Sing, 2022; Ndlovu, 2023). As Walther's (1992) theory of Social Information Processing (SIP) suggests, users of digital platforms adapt their communication styles over time to create intimacy and relational closeness, even in text-based environments. This insight is particularly relevant in the context of under-resourced universities, where WhatsApp fills multiple roles as a classroom extension, a support hotline, and sometimes even a safe space for expression (Maringe & Sing, 2022).

Communication Patterns in WhatsApp Tutoring

WhatsApp has transformed how tutors and students interact, enabling communication that is more immediate, flexible, and sometimes less formal than traditional classroom settings (Jantjies & Joy, 2019; Musa & Dube, 2025). Communication patterns that emerge within WhatsApp-based tutoring are diverse and multifaceted, ranging from instructional

exchanges to emotional support, and sometimes even peer-to-peer collaboration. These communication exchanges are shaped by both the affordances of the WhatsApp platform and the social dynamics of the tutor-student relationship.

One of the prominent communication patterns observed in WhatsApp tutoring is the informal yet responsive nature of the interaction (Robson & Selwyn, 2020; Adeyemi & Banda, 2024). Misinterpretations of tone or intent are common, leading to communication breakdowns, overcompensation by tutors, and potential emotional fatigue (Barhoumi, 2021; Maphosa & Ndamba, 2021). Group-based WhatsApp interactions facilitate peer collaboration and resource sharing, yet managing group dynamics and maintaining academic focus presents additional challenges (Maringe & Sing, 2022; Khumalo & Ndlovu, 2023). Tutors frequently employ WhatsApp for quick clarification of academic content, responding to students' inquiries promptly (Chigona, 2019). This immediacy in communication stands in stark contrast to more traditional, scheduled office hours or email-based interactions that may have longer response times. Jantjies and Joy (2019) note that the asynchronous nature of WhatsApp allows students to seek help at any time, which can be particularly valuable for those who work irregular hours or face constraints such as transportation or family responsibilities. This "always-on" aspect fosters a sense of continuous academic support, which can increase student engagement and retention (Maringe & Sing, 2022).

However, while this immediacy can be beneficial, it also leads to challenges in communication boundaries. The informal nature of WhatsApp messages, often using emojis, abbreviations, and even voice notes, can blur the lines between academic and personal exchanges (Robson & Selwyn, 2020). Tutors might struggle with the balance between maintaining professional distance and offering emotional or academic support, particularly in culturally diverse classrooms where expectations around communication norms differ (Nonyelum & Adebisi, 2021). As Maphosa and Ndamba (2021) suggest, the lack of a formal structure for WhatsApp communication can result in

misunderstandings or a breakdown in professional boundaries, leaving tutors unsure about when to draw the line in terms of emotional involvement.

A key component of WhatsApp communication in tutoring is the relational warmth that it facilitates. Tutors often use the platform to build stronger rapport with their students, engaging in more personalized communication than what might be typical in face-to-face interactions (Kumi-Yeboah et al., 2020). The use of emoticons, voice messages, and informal language helps create a warm and approachable tone, which has been shown to improve students' perceptions of their tutors as more accessible and supportive (Walther, 1992). According to Robson and Selwyn (2020), this emotional support is particularly crucial in contexts where students experience academic stress or emotional distress. WhatsApp's accessibility offers a way for students to communicate their anxieties or challenges that they might be less willing to do in more formal settings.

Communication breakdowns remain a significant concern in WhatsApp-based tutoring. These occur due to factors such as delayed responses, unclear instructions, and misinterpretation of tone (Barhoumi, 2021). WhatsApp's lack of face-to-face interaction means that students and tutors must rely solely on written and sometimes audio cues, which can lead to ambiguity. Misunderstandings can arise when tone or intent is misinterpreted, particularly when students are reading messages without the non-verbal cues present in face-to-face interactions (Maphosa & Ndamba, 2021). The ease with which students can initiate communication at any time can result in students overwhelming their tutors with questions, leading to communication overload for tutors (Ng'ambi & Bozalek, 2019).

Another emerging communication pattern is peer-to-peer communication, where WhatsApp groups and networks facilitate student collaboration. Tutors sometimes create group chats where students can share resources, discuss assignments, or offer peer-to-peer academic support (Maringe & Sing, 2022). This type of interaction can strengthen the learning community, encourage collaborative learning, and enhance

students' engagement with course materials. This also presents challenges in terms of managing group dynamics and ensuring that the space remains academically focused and respectful (Robson & Selwyn, 2020).

Digital etiquette plays a crucial role in shaping WhatsApp communication patterns. Tutors often have to navigate issues related to response time expectations, message tone, and content-sharing norms (Barhoumi, 2021). As Maphosa and Ndamba (2021) point out, tutors' digital etiquette, such as how quickly they respond to messages or how they handle informal language, can significantly impact the effectiveness of the tutoring experience. Without clear guidelines on acceptable conduct, both tutors and students may face confusion regarding what is expected in terms of professional behaviour on WhatsApp.

Challenges and Ethical Considerations in Mobile-Mediated Tutoring

While WhatsApp enhances accessibility and immediacy, it introduces ethical and practical challenges. Tutors often experience boundary erosion and burnout due to after-hours messages and the “always-on” expectation (Ndlovu, 2021; Ng'ambi & Bozalek, 2019; Adeyemi & Banda, 2024). This “always-on” culture may also create an unhealthy dynamic where students feel entitled to immediate responses, undermining the tutor's work-life balance (Ng'ambi & Bozalek, 2019).

Another ethical concern revolves around privacy and data protection as key concerns, while WhatsApp exchanges involve personal contact information without formal institutional oversight, raising questions of consent, confidentiality, and security (Kwet, 2019; Khumalo & Ndlovu, 2023). Since WhatsApp is not a university-sanctioned platform and often involves the exchange of personal contact details, it raises issues regarding informed consent, confidentiality, and institutional oversight (Kwet, 2019). Students and tutors may feel pressured to participate in WhatsApp groups without clear guidelines on data security or the potential for personal information to be misused (Maringe & Sing, 2022). The informal nature of the platform can sometimes lead to inappropriate interactions or miscommunications that may affect

professional relationships and institutional reputations (Maphosa & Ndamba, 2021).

Power dynamics further complicate mobile-mediated tutoring. Tutors might find it difficult to assert authority or uphold academic standards when interactions become overly casual. At the same time, students from marginalised backgrounds may be reluctant to engage due to concerns about digital etiquette, language use, or fear of surveillance in WhatsApp groups (Chigona, 2019). These concerns point to the need for contextualised digital literacy training for both tutors and students to ensure ethical, inclusive, and effective use of mobile technologies.

There is also a lack of institutional policy to guide the ethical use of mobile messaging in tutoring. Without formal protocols, tutors are left to navigate complex issues on their own, from managing inappropriate messages to deciding when to report emotional disclosures made by students on the platform (Kumi-Yeboah et al., 2020). These ethical grey areas highlight the importance of embedding ethical considerations into tutor training and developing university-wide guidelines for mobile-mediated academic support.

Despite extensive recognition of WhatsApp as a pedagogical and relational tool, key gaps persist. Most studies emphasise student experiences or general digital learning platforms, with limited focus on tutors' perspectives and the nuanced patterns of their communication. Furthermore, research rarely addresses contemporary African higher education contexts post-2022, where mobile-mediated tutoring occurs amid resource constraints, linguistic diversity, and socio-cultural complexity. Few studies systematically examine the interplay between relational, instructional, and ethical dimensions of WhatsApp use. This study addresses these gaps by exploring tutors' lived experiences, communication strategies, and challenges in WhatsApp-mediated academic support within a South African university context, thereby providing insights into effective, culturally responsive, and sustainable mobile learning practices.

Methods

This study employed a qualitative research design grounded in the interpretivist paradigm, aiming to explore tutors' lived experiences and perceptions of WhatsApp-based communication with students in a South African university. The qualitative design was appropriate for capturing the richness, context, and meaning embedded in tutor-student interactions that quantitative methods might overlook. The research followed an exploratory case study approach, allowing for in-depth, contextualised understanding of digital communication practices within under-resourced higher education settings. A purposive sampling technique was used to select thirty (30) tutors from various faculties. This non-probability sampling strategy enabled the selection of participants who possessed specific characteristics relevant to the study's objectives. Selection criteria included prior experience using WhatsApp for academic communication, active engagement with students via the platform, and willingness to share anonymised chat excerpts. The sample was deliberately chosen to reflect a range of disciplines, academic years, and levels of tutoring experience, enhancing the credibility and transferability of the findings. The sample size of thirty was methodologically justified on two grounds. First, qualitative case study research typically prioritises depth over breadth, and thirty participants provided sufficient diversity across disciplines and tutoring roles to support analytic robustness. Second, data saturation was achieved, as no new themes or significant insights emerged after approximately the twenty-fifth interview; the remaining interviews confirmed and deepened existing patterns.

The deliberate inclusion of tutors with varied disciplinary backgrounds and years of experience strengthened the credibility and transferability of the findings. Data was collected through two primary methods, semi-structured interviews and WhatsApp chat excerpts. Each tutor participated in a 30–45-minute interview, which focused on their use of WhatsApp, communication practices, perceived benefits, and challenges encountered. Participants also submitted de-identified screenshots of WhatsApp conversations with students that they considered representative of their typical communication patterns. Thematic analysis was employed to

analyse the data, following Braun and Clarke’s (2006) six-phase framework: familiarisation with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Coding was both inductive and deductive driven by emergent patterns in the data and informed by Computer-Mediated Communication (CMC) theory, which

served as the guiding theoretical lens. All participants provided informed consent and were assured of confidentiality, anonymity, and their right to withdraw from the study at any stage. Identifiable information in chat excerpts was removed or anonymised to protect participants and their students.

Table 1. Participant characteristics

Participant ID	Faculty/Discipline	Years of Tutoring Experience	Primary Use of WhatsApp	Frequency of Use
T01–T30	Humanities, Science, Management & Law, Health Sciences	1– 4 years	Content clarification, reminders, emotional support, group coordination	Daily to several times per week

Note: The table summarises collective characteristics; full demographic details are withheld to maintain confidentiality.

Findings and Discussion

Thematic analysis revealed four dominant themes that characterise the communication patterns between tutors and students on WhatsApp: (1) relational warmth and rapport-building, (2) instructional responsiveness, (3) blurred boundaries and etiquette challenges, and (4) digital miscommunication and breakdowns.

Relational Warmth and Rapport-Building

Tutors reported using greetings, emojis, motivational phrases, and emotional check-ins to build and maintain rapport with students. These small but consistent efforts contributed to a sense of care and support that extended beyond academic instruction. This relational approach was especially valued in a context where students often faced socio-economic stressors and feelings of academic inadequacy.

One tutor explained, *“Sometimes students just want to hear that they’re doing okay... A ‘You’ve got this’ message really goes a long way.”*

Another tutor described how checking in helped sustain relationships, *“When a student hasn’t submitted or hasn’t shown up in class, I just send a message like ‘Hey, are you okay?’ That makes a big difference. It shows I care.”*

Tutors also reflected on how emojis and tone-adjusted messages helped reduce hierarchy, *“When I use emojis or a friendly tone, I notice students open up more. They ask more questions. They don’t feel intimidated.”*

These narratives underscore the relational dimensions of digital communication that often go unrecognised in academic settings. By engaging in emotional labor and relational messaging, tutors helped humanise their interactions, bridging the physical and emotional distance of mobile-mediated learning.

From a CMC theory perspective, these practices illustrate how users adapt their communication styles to build social presence in text-based environments (Walther, 1992). While WhatsApp lacks non-verbal cues, tutors compensated by using affective markers, emojis, punctuation, and motivational language to foster warmth and approachability. In under-resourced educational settings, such rapport-building is not merely supplementary but foundational to sustained engagement. These findings suggest that tutor training programs should intentionally include modules on emotional intelligence and digital relationality to better equip tutors for the nuanced work of supporting students through digital means.

Instructional Responsiveness

Many tutors emphasised WhatsApp's usefulness in offering timely clarification of concepts, sending reminders, and reinforcing classroom content. Students often posed follow-up questions after lectures, and tutors responded with voice notes, explanatory texts, or links to resources. Tutors appreciated the platform's immediacy and multimedia flexibility, which allowed them to adapt their responses to students' varying needs and preferences. One tutor explained:

"Sometimes a student will message me late in the evening asking, 'I didn't understand that part about the null hypothesis, can you explain again?' Instead of typing a long response, I just send a quick voice note. It's faster and they appreciate hearing the tone and explanation."

Another noted:

"After every tutorial, I send a summary and sometimes a YouTube video link for extra support. It helps reinforce what we did and keeps them engaged."

These practices align with the research objective of understanding how WhatsApp facilitates learning beyond formal instructional spaces. The platform's immediacy and multimodality promote micro-scaffolding, enabling personalised, low-threshold academic engagement (Daft & Lengel, 1986; Barhoumi, 2021). Tutors' use of voice notes and multimedia links illustrates how digital tools can extend learning beyond the classroom, allowing for real-time and personalized support. This aligns with Walther's (1992) Social Information Processing Theory, which suggests that users adapt their communication styles in digital spaces to convey clarity and emotion effectively. Instructional responsiveness via WhatsApp also serves as a form of micro-teaching, where tutors scaffold learning by breaking complex concepts into digestible, informal explanations (Daft & Lengel, 1986). The flexibility to respond in multiple formats text, audio, video enables tutors to cater to diverse learning preferences, enhancing inclusivity and accessibility (Barhoumi, 2021). Moreover, the platform's immediacy reinforces a sense of academic presence, which is often

missing in traditional university settings with large class sizes and limited tutor-student interaction (Chigona, 2019).

The continuous flow of academic queries can also blur the boundaries between academic and personal time for tutors, creating potential burnout if expectations are not managed. The ability to respond "anytime, anywhere" can inadvertently pressure tutors to be always available raising concerns around workload and institutional support (Robson & Selwyn, 2020). These concerns underscore the need for clear communication guidelines and formal recognition of digital pedagogical labour within universities.

Blurred Boundaries and Etiquette Challenges

While WhatsApp enabled efficient communication, tutors expressed discomfort with the erosion of professional boundaries. Many tutors reported receiving messages late at night, over weekends, or during family time, which left them feeling overwhelmed or disrespected. Others noted that students often used overly casual language, such as emojis, slang, or voice notes without greetings, making tutors question the exchanges' seriousness. One tutor shared: *"I'd get a 'hey' at 10:30 p.m., with no context or even a greeting. It felt like students didn't realize I'm not available 24/7."* Another tutor added: *"They'll message things like 'plz xplain dat topic again'. No punctuation, no proper sentence structure. It's like they forget I'm not their peer."*

To mitigate these challenges, some tutors created informal boundaries by setting availability hours or responding only on weekdays. One tutor explained: *"I told them I don't respond after 8 p.m., but even then, some still send messages at midnight. They say 'I wasn't expecting a reply, I just didn't want to forget.' It's hard to manage."*

These findings speak to the dual-edged nature of WhatsApp as an academic communication tool. While it offers flexibility and immediacy, it can also foster informality that conflicts with expected tutor-student hierarchies. This tension reflects broader issues of digital professionalism and the negotiation of identity in online spaces (Robson & Selwyn, 2020). From a CMC perspective, the lack of nonverbal cues and context in digital messages can result in

misinterpretations, especially when social norms are not explicitly established (Walther, 1992). Tutors' discomfort with casual tone and untimely messages illustrates the need for clearer communication protocols and orientation for both tutors and students regarding appropriate digital conduct.

At the same time, the informality may also reflect students' attempts to connect more personally or cope with anxiety about academic content, especially in under-resourced contexts where students may lack the digital literacy or formal communication training expected in university spaces. These blurred boundaries thus highlight the importance of not only training tutors in digital communication strategies but also supporting students in navigating academic discourse norms. Establishing shared expectations and boundaries, possibly through co-created communication guidelines, could help mediate these tensions and foster a more respectful and effective WhatsApp-based learning environment.

Digital Miscommunication and Breakdowns

The absence of tone, facial expressions, and other non-verbal cues in WhatsApp communication often led to misunderstandings between tutors and students. Tutors shared multiple instances where messages were misread, leading to confusion or emotional friction. One tutor recalled: *"I once gave a student feedback on their assignment and said, 'You need to work harder on this section,' and they responded with, 'Why are you angry with me?' I wasn't angry at all, I was just being direct."* Another shared: *"It's difficult to know if they're joking, being serious, or upset. One student sent a thumbs-up emoji after I explained something. Was it an agreement? Was it sarcasm? I had no idea."* Tutors also expressed frustration at the difficulty of assessing students' emotional states or comprehension based on brief or ambiguous messages. As one tutor put it: *"Sometimes I'd ask, 'Do you understand?' and the reply would just be 'Yes.' But later in person, they'd admit they were completely lost. It's like the platform makes it easier for them to mask confusion."*

Some tutors responded by overcompensating, adding emojis, exclamation

marks, or voice notes to convey friendliness or clarity: *"I started using voice notes more often so they could hear my tone. Otherwise, they'd think I'm being rude when I'm just trying to be efficient."*

These accounts reveal the communicative fragility of text-based digital platforms like WhatsApp, especially in emotionally or cognitively complex academic interactions. From a CMC perspective, the lack of non-verbal signals can impair relational clarity, increase ambiguity, and foster misinterpretation (Walther, 1992). The tutors' adaptations, such as voice notes and tone-marking punctuation, highlight how users actively attempt to mitigate these limitations, though such efforts are not always successful.

The findings point to a broader issue of emotional labor and communicative exhaustion experienced by tutors, who often feel responsible for maintaining clarity and warmth in an inherently constrained medium. These challenges underscore the importance of integrating digital literacy and emotional intelligence training into tutor development programs. Establishing clearer communication norms, such as confirming understanding, avoiding ambiguous phrasing, and using multimodal messages, could help reduce miscommunication and promote a more empathetic and effective WhatsApp-based academic dialogue.

Conclusion

This study demonstrates that WhatsApp operates as a complex communicative and pedagogical space through which tutors negotiate instructional, relational, and emotional responsibilities. The platform's immediacy and multimodality enable tutors to provide personalised academic support, foster relational warmth, and extend learning beyond formal tutorial spaces. These affordances are particularly significant in under-resourced higher education environments, where infrastructural constraints and large class sizes limit sustained face-to-face engagement.

At the same time, the findings illuminate the tensions inherent in using a social platform for academic purposes. Tutors experience blurred boundaries between personal and professional

domains, challenges related to digital etiquette, and frequent communicative ambiguities arising from the absence of non-verbal cues. These pressures often result in emotional and cognitive strain, underscoring the invisible labour required to maintain clarity, care, and academic presence in digitally mediated interactions.

The study ultimately foregrounds WhatsApp communication as both pedagogically valuable and relationally demanding. It underscores the need for institutions to develop structured, contextually grounded approaches that support tutors while leveraging the platform's potential to enhance student learning. By attending to the lived experiences of tutors, the study advances broader debates on digital pedagogies in African higher education and highlights the relational dimensions underpinning mobile-mediated academic support.

Recommendations

Co-created Digital Communication Guidelines

Universities should develop clear, jointly constructed guidelines delineating expectations regarding response times, appropriate modes of address, and boundaries for after-hours communication. A co-created approach ensures mutual accountability, enhances compliance, and fosters a shared understanding of professional digital conduct.

Integration of Digital Communication and Emotional Intelligence Training

Tutor development programmes should incorporate training on digital professionalism, socio-emotional communication, and strategies for managing tone, clarity, and boundary-setting on mobile platforms. Such training equips tutors to navigate the relational complexities of WhatsApp-mediated academic support and enhances the quality of instructional exchanges.

Formal Recognition of Digital and Emotional Labour

Institutions should acknowledge the emotional and communicative labour embedded in WhatsApp-based support by incorporating it into workload models, performance evaluations, or incentives. Recognising this labour safeguards

tutor wellbeing and legitimises the relational work that contributes meaningfully to student success.

Support for Students' Digital Academic Literacy

Students should receive orientation on academic communication norms, including appropriate tone, etiquette, and message structure. Strengthening students' digital literacy reduces miscommunication, enhances professionalism, and mitigates the relational tensions reported by tutors.

Contextually Responsive Institutional Policies

Any guidelines or interventions should reflect the socio-cultural and linguistic realities of South African higher education. Policies must remain sensitive to access disparities, communicative norms, and relationship-centred practices that shape tutor–student interaction.

Future research directions

Future studies should extend this work by incorporating the perspectives of students who engage with tutors on WhatsApp, enabling a more holistic understanding of digital communication dynamics. Comparative research across universities with varying resource levels could also illuminate institutional factors shaping WhatsApp use and support structures. In addition, longitudinal studies examining how digital communication practices evolve, especially as institutions formalise guidelines or introduce training, would provide deeper insights into sustainable models of mobile-mediated academic support. Future research could explore discipline-specific differences in WhatsApp communication to expand the applicability of the findings across diverse educational contexts.

Disclosure

Conflict of interest

The authors declare no conflict of interest

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