

Perception of Post-Graduate Students on the Effectiveness of Communication Channels for Information Sharing among Federal Universities in North-West Zone, Nigeria

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ABSTRACT

This study examined postgraduate students' perceptions of the effectiveness of communication channels used for information sharing in federal universities in the North-West zone of Nigeria. The research pursued two objectives: to identify the communication channels most frequently used by these universities to disseminate information to postgraduate students, and to assess students' perceptions of the effectiveness of these channels in terms of timeliness, accessibility, clarity, reliability, and suitability. A descriptive survey design was adopted. Of 341 questionnaires administered to postgraduate students drawn from six federal universities in the zone, 334 were validly completed and analysed, using a structured, expert-validated questionnaire whose reliability was confirmed through a Cronbach's alpha pilot test. Data were analysed using descriptive statistics. The findings show that students hold a hybrid orientation toward communication, favouring digital channels such as SMS, email, and social media for speed and convenience, while depending on physical meetings, seminars, and noticeboards for clarity and reassurance on high-stakes academic matters. Despite this readiness to engage with multiple channels, respondents rated the current institutional communication system as largely ineffective, with more than seventy percent expressing dissatisfaction across all five dimensions assessed. The study concludes that federal universities in the region need a deliberate hybrid communication policy that matches channel richness to message complexity, supported by stronger digital infrastructure. Its originality lies in offering an empirically grounded, zone-specific account of postgraduate communication needs, an area which previous studies have addressed mainly at the undergraduate level or without attention to the particular pressures of postgraduate research timelines.

Keywords: Communication Channels; Effectiveness; Federal Universities; Information Sharing; Perception; Post-Graduate Students

1. Introduction

Higher education institutions depend on clear, timely, and reliable communication to coordinate teaching, supervise research, manage administrative processes, and connect scholars with opportunities. For postgraduate students, who work under tight research timelines, complex supervisory relationships, and frequent administrative deadlines, effective information sharing is not merely a convenience but a condition for academic progress. The COVID-19 pandemic accelerated the use of instant messaging and social media platforms as informal pedagogical spaces, a shift that demonstrated the capacity of non-traditional channels such as WhatsApp to provide immediacy and social support while also exposing new risks around information quality, distraction, and informality (Van den Berg & Mudau, 2022).

Perception is central to how students respond to these channels. It is the psychological process through which individuals select, organise, and interpret information from their environment, shaped by prior experience, expectation, and socio-cultural background rather than by objective conditions alone (Naheed, 2024). Because reactions to institutional communication are filtered through this interpretive process, two students exposed to the same message or the same channel can reach different conclusions about its usefulness. Examining how postgraduate students perceive communication channels therefore offers a more accurate picture of institutional effectiveness than simply cataloguing which channels are available.

Communication channels sit at the centre of how educational institutions function, particularly in settings where the timely dissemination of information shapes students' academic engagement and overall performance. In higher education, channels such as email, learning management systems, social media platforms, SMS alerts, noticeboards, and institutional websites connect students with administrators, lecturers, and support services (Moghavvemi et al., 2015). The growing range of these channels raises real questions about how students perceive their efficiency, accessibility, reliability, and suitability for academic purposes, and understanding this perception is a necessary step toward improving institutional communication strategy (Adeleke & Aremu, 2020). In both organisational and public settings, the choice of channel plays a decisive role in how information is received, interpreted, and acted upon (Kreps, 2017).

Nigeria's higher education sector illustrates this tension clearly. Technological adoption is accelerating, yet substantial gaps remain in technical support, staff training, and the organisational change needed to make communication channels dependable for high-stakes postgraduate needs. Akaeze and Akaeze (2024) show that lecturers and administrators face real constraints in adapting online systems, constraints that ripple outward to affect students, and they recommend infrastructure upgrades, capacity development, and policy realignment to close the gap between stated ICT policy and lived communication experience. Ifedili (2018) and Nwokeocha (2021) make a related point at the administrative level, noting that Nigerian university administrations often struggle to translate formal communication structures into consistent, timely practice, which undermines confidence in official channels even where those channels technically exist.

Existing Nigerian studies on university communication, however, have concentrated mainly on general or undergraduate student populations, with comparatively little attention paid to postgraduate students, whose reliance on precise, time-bound information—such as supervision feedback, defence schedules, and grant deadlines—differs markedly from the routine academic notices that dominate undergraduate communication. In the Federal Universities of the North-West zone, namely Ahmadu Bello University Zaria, Bayero University Kano, Usmanu Danfodiyo University Sokoto, Federal University Dutse, Federal University Birnin Kebbi, and Federal University Dutsin-Ma, this gap is compounded by regional infrastructural conditions that may shape communication experience differently from other parts of the country. The effectiveness of channels used to relay information to postgraduate students in this zone is influenced by technological infrastructure, digital literacy, accessibility, and the promptness of updates, as well as by the media habits and preferences of the students themselves. The problem, in other words, is not the absence of communication channels

but uncertainty over which of the many available channels are genuinely effective, which are underused, and how existing arrangements might be realigned to match student needs. Left unexamined, this uncertainty risks perpetuating frustration and inefficiency within the academic environment (Mumtaz et al., 2023).

It is against this background that the present study investigates postgraduate students' perceptions of the effectiveness of communication channels for information sharing in Federal Universities in the North-West zone of Nigeria. Specifically, the study sets out to identify the communication channels most preferred by postgraduate students for receiving information from their universities, and to assess how these students perceive the effectiveness of the channels in terms of timeliness, accessibility, clarity, reliability, and suitability. By focusing on postgraduate students in a region where infrastructural and access conditions differ from other zones, the study aims to generate findings that can inform more precisely targeted interventions than would be possible from broader, zone-agnostic research.

2. Literature Review

Communication, at its simplest, is the transfer of understanding from one party to another; the information conveyed only counts as communication if it is intelligible to the receiver (Kreps, 2017). Within organisations, the effectiveness of this transfer depends heavily on the channel through which it travels, since channels differ in speed, reach, and their capacity to carry nuance. Universities, as knowledge-based organisations, apply this principle daily: teaching, research supervision, and administration all depend on channels that can move information from management, lecturers, and administrative units to students in usable form (Ifedili, 2018; Nwokeocha, 2021). As the volume of institutional information has grown, so has the range of channels competing for students' attention—email, learning management systems, social media, SMS, noticeboards, and institutional websites among them, each with distinct strengths and limitations (Moghavvemi et al., 2015; Adeleke & Aremu, 2020).

2.1 Theoretical Framework

This study is anchored on two complementary communication models: Uses and Gratifications Theory, formulated by Blumler and Katz (1974), and Diffusion of Innovations Theory, developed by Rogers (2003). Uses and Gratifications Theory holds that media consumers are active, goal-directed participants who deliberately select specific communication channels to satisfy personal, psychological, or operational needs, including information seeking, cognitive clarity, and surveillance (Blumler & Katz, 1974; McQuail, 2010). Postgraduate students in the Federal Universities of North-West Nigeria operate under tight academic schedules, research deadlines, and institutional obligations, and the theory frames them as active information seekers who evaluate the channels open to them—whether physical noticeboards, official institutional email, bulk SMS, administrative WhatsApp groups, or university portals—and deliberately select those that best gratify their urgent information needs. This addresses the study's first objective directly, by treating channel preference as a matter of active choice rather than passive exposure.

Diffusion of Innovations Theory complements this by explaining how an idea, practice, or technology spreads through a social system via specific communication channels over time. It draws attention to the structural attributes of a channel—its relative advantage over legacy methods, its complexity or ease of access, and its compatibility with daily routines—as the key determinants of how effectively information is adopted by recipients (Rogers, 2003). This maps onto the study's second objective by supplying the criteria through which postgraduate students evaluate institutional channels: timeliness as a function of how quickly a message reaches them, accessibility as a function of how easily the channel can be entered under varied internet or power conditions, and clarity, reliability, and suitability as further measures of whether a channel fits the demands of postgraduate communication. Read together, the two theories describe a single communication loop: institutional sender selection and dissemination, captured by Diffusion of Innovations attributes, meets active postgraduate reception and use, captured by Uses and Gratifications motivations. This combined lens is what allows the study to identify empirically which channels succeed in bridging administrative

communication gaps for postgraduate scholars in the region.

2.2 Empirical Review

Empirical work on information dissemination in Nigerian higher education points to a persistent divide between the channels universities designate as official and the channels students actually find useful. Ojedokun and Olayiwola (2018), examining federal universities in South-West Nigeria, found that although institutional web portals and paper-based bulletin boards remained the official standard for policy dissemination, more than three-quarters of postgraduate respondents rated them as moderately ineffective because of slow update cycles and bureaucratic delay. Abdulrahman et al. (2020), working across tertiary institutions in Northern Nigeria, reported a parallel pattern: postgraduate students strongly preferred mobile instant messaging platforms such as WhatsApp and Telegram over institutional email and portals, citing immediate notifications, ease of document sharing, and low data requirements, particularly where internet connectivity is unreliable.

This preference for informal digital channels becomes sharper once the focus narrows to the North-West zone, where infrastructural conditions compound the problem. At Ahmadu Bello University, Zaria, Suleiman and Yusuf (2021) found that more than two-thirds of postgraduate students experienced critical delays when they depended solely on departmental noticeboards and university email for information about thesis defence timelines and grant opportunities; institutional emails suffered from low open rates and server downtime, which pushed class representatives to build informal WhatsApp networks that re-transmitted official notices faster than the official channels themselves. Balarabe and Garba (2022), surveying postgraduate researchers at Bayero University Kano and Usmanu Danfodiyo University Sokoto, quantified this trade-off, reporting a statistically significant negative relationship between how formal a channel was and how quickly it delivered information: official memos scored highest on perceived authenticity but lowest on speed and accessibility, while informal class groups showed the reverse pattern.

Infrastructural barriers extend this dynamic further. Ibrahim and Umar (2023), assessing e-learning and administrative platforms at Federal University Dutse and Federal University Gusau, identified power outages, network throttling on semi-urban campuses, and server maintenance downtime as the main obstacles to sustained digital channel adoption; roughly seven in ten postgraduate respondents judged university web portals ineffective during peak registration and seminar scheduling periods, driving heavier reliance on peer networks and departmental social media groups. Oguiche and Abubakar (2022) reach a similar conclusion in their broader review of digital infrastructure and information-seeking behaviour among postgraduate researchers in the North-West zone, arguing that infrastructural unevenness across the region's federal universities produces inconsistent communication experiences even where formal policy is uniform. Abubakar and Mohammed (2024), focusing on supervisor-student communication at Federal University Birnin Kebbi and Federal University Dutsin-Ma, add a further dimension: complex academic feedback—such as dissertation critique and methodology correction—was perceived as poorly served by unstructured instant messages or generic portal updates, and students reported needing synchronous consultation or structured email exchange to preserve clarity.

Read together, these studies point to a consistent duality rather than a simple preference for one channel type over another. Informal mobile platforms perform well on speed and accessibility for routine, day-to-day logistics, while formal institutional channels retain authority and legal standing despite their slower pace and infrastructural exposure. What remains less examined, and what this study addresses directly, is how postgraduate students in the North-West zone weigh this trade-off across the specific dimensions of timeliness, accessibility, clarity, reliability, and suitability, and whether their evaluations differ from the general communication patterns reported in earlier undergraduate-focused or zone-agnostic research.

3. Methodology

The study adopted a descriptive survey research design, which is well suited to describing existing conditions and examining relationships among variables without manipulating the research environment (Hirose & Creswell, 2023). This design allowed for the collection of quantitative data on postgraduate students' perceptions of the effectiveness of communication channels used to disseminate information within their universities.

The population comprised all postgraduate students admitted as of the 2025 academic session across the six federal universities in the North-West zone of Nigeria, namely Federal University Dutse, Bayero University Kano, Federal University Birnin Kebbi, Ahmadu Bello University Zaria, Federal University Gusau, and Usmanu Danfodiyo University Sokoto, a combined population of 10,787 students. Students were included in the study if they were formally registered for a postgraduate programme, at either Masters or PhD level, in one of these universities during the 2025/2026 session, and had used at least one university communication channel since admission. Students on approved leave of absence, those enrolled in purely distance-learning arrangements with no physical engagement with campus communication systems, and first-semester entrants with no prior exposure to the university's communication channels were excluded, since their responses would not meaningfully reflect experience with the channels under investigation.

Using Taro Yamane's (1976) formula, a sample of 341 postgraduate students was drawn from this population. Of the 341 questionnaires administered, 334 were correctly completed and returned, a response rate of approximately 98 percent, and the analysis reported here is based on these 334 valid responses. Data were collected using a structured questionnaire developed from the study objectives and the reviewed literature. Content and face validity were established through review by experts in Library and Information Science and research methodology, who assessed the instrument for clarity, relevance, and alignment with the study's objectives. Reliability was tested through a pilot study using Cronbach's alpha, which returned a coefficient of 0.86, above the conventional threshold of 0.70 for acceptable internal consistency. Descriptive statistics, principally, frequencies and percentages, were used to answer the research questions.

4. Results and Discussion

Communication channels used in disseminating information to postgraduate students are presented in Table 1.

Table 1: Communication channels used in disseminating information to postgraduate students

S/ N	Items	Prepared	Most Prepared	Undecided	Not Prepared	%
1	Email	98 (29.3%)	162 (48.5%)	46 (13.8%)	28 (8.4%)	100%
2	Social media platforms (e.g., WhatsApp, Facebook)	125 (37.4%)	143 (42.8%)	48 (14.4%)	18 (5.4%)	100%
3	Official university website	162 (48.5%)	144 (43.1%)	28 (8.4%)	0 (0.0%)	100%
4	Noticeboards within the university	198 (59.3%)	107 (32.0%)	29 (8.7%)	0 (0.0%)	100%
5	Via SMS or text messaging	179 (53.6%)	109 (32.6%)	46 (13.8%)	0 (0.0%)	100%
6	Physical meeting or seminars	135 (40.4%)	186 (55.7%)	13 (3.9%)	0 (0.0%)	100%

Source: Field work (2026).

Table 1 shows that postgraduate students (N = 334) report a generally high level of readiness to engage with the communication channels available to them, with combined "prepared" and "most prepared" responses exceeding 77 percent for every channel listed. Physical meetings and seminars recorded the strongest overall standing, combining the

highest “most prepared” rate (55.7%, $n = 186$) with the highest total readiness (96.1%, $n = 321$). Official institutional channels, specifically the university website (91.6%), campus noticeboards (91.3%), and SMS messaging (86.2%), also drew strong acceptance, with no respondent reporting a complete lack of readiness to use them. Social media platforms (80.2%) and email (77.8%) retained solid majority support but were the only channels to attract meaningful non-preparedness, at 5.4 percent ($n = 18$) and 8.4 percent ($n = 28$) respectively. Read alongside the willingness shown for physical and official web channels, this pattern suggests that students are not averse to digital platforms as such, but that a multi-channel strategy anchored in direct, official communication is more likely to reach the full postgraduate population than reliance on any single digital medium.

Respondents’ perceptions of the effectiveness of these channels, based on timeliness, accessibility, clarity, reliability, and suitability, are presented in Table 2.

Table 2: Respondents’ perception of the effectiveness of communication channels

S/ N	Question	Strongly Agree	Agree	Undecid ed	Disagree	Strongly Disagree	%
1	The communication channels provide information in a timely manner when updates are needed.	30 (9.0%)	34 (10.2%)	8 (2.4%)	172 (51.5%)	90 (26.9%)	100%
2	The communication channels used by the university are easily accessible to me at any time.	30 (9.0%)	39 (11.7%)	25 (7.5%)	133 (39.8%)	107 (32.0%)	100%
3	Information shared through the communication channels is clear and easy to understand.	52 (15.6%)	31 (9.3%)	17 (5.1%)	123 (36.8%)	111 (33.2%)	100%
4	I find the information disseminated through these channels to be reliable and trustworthy.	44 (13.2%)	35 (10.5%)	15 (4.5%)	117 (35.0%)	123 (36.8%)	100%
5	The communication channels used in the study area are suitable for my academic needs as a postgraduate student.	33 (9.9%)	26 (7.8%)	35 (10.5%)	133 (39.8%)	107 (32.0%)	100%

Source: Field work (2026).

Table 2 tells a less encouraging story. Across all five dimensions assessed, a clear majority of respondents expressed dissatisfaction, with combined disagreement (“disagree” and “strongly disagree”) ranging from 70.0 to 78.4 percent. Timeliness was the weakest dimension: 78.4 percent ($n = 262$) disagreed that information reaches them promptly, against only 19.2 percent ($n = 64$) who agreed. Accessibility and reliability were rated almost identically poorly, at 71.8 percent ($n = 240$) disagreement each, while 70.0 percent ($n = 234$) disputed the clarity of the information disseminated. On suitability, 71.8 percent ($n = 240$) felt the current channels did not meet their academic needs as postgraduate students, against 17.7 percent ($n = 59$) who considered them suitable. Taken together, these results indicate that although students are structurally willing to use the channels available to them, as Table 1 shows, the channels themselves are failing to deliver information in a way that satisfies basic expectations of speed, access, honesty, clarity, and fit for purpose.

These two findings, read side by side, are best explained through the Uses and Gratifications and Diffusion of Innovations perspectives set out earlier. Students approach communication channels as active, goal-directed users rather than passive recipients: they turn to digital platforms such as SMS, email, and social media when they need convenience and speed, and to physical meetings, seminars, and noticeboards when they need certainty and reinforcement on higher-stakes matters. This dual orientation mirrors what Oloyede et al. (2022) found among postgraduate cohorts elsewhere in Nigeria, where 78 percent of respondents preferred digital channels for routine reminders but still relied on print-backed, in-person engagement for formal academic clearance. Adekoya and Mensah (2023) report a comparable

pattern across West African universities more broadly, where a majority leaned on mobile platforms for immediate notices yet turned to face-to-face interaction when resolving academic grievances that required unambiguous resolution. The consistency of this pattern across different institutional settings suggests that the hybrid preference documented here is not idiosyncratic to the North-West zone but reflects a more general feature of how postgraduate students manage communication risk.

The negative effectiveness ratings, by contrast, point to a mismatch between the channel attributes that Diffusion of Innovations Theory identifies as necessary for adoption—namely relative advantage, low complexity, and compatibility with daily routines—and what students in this study actually experience. When institutional channels fail to deliver timely, accessible, and reliable updates, the gratifications students seek from them—certainty, administrative efficiency, and usable information—go unmet, producing friction, delay, and declining trust in official communication. This finding is consistent with Ibrahim and Nwankwo (2021), who found that more than seven in ten graduate students experienced delayed academic compliance because of server downtime and inconsistent notification systems, and with the infrastructural concerns raised earlier by Ibrahim and Umar (2023) and Oguche and Abubakar (2022) in relation to the North-West zone specifically.

These communication failures are unlikely to stem from student disengagement. Kassim et al. (2023) and Bello (2020) both point to persistent infrastructure deficits, power instability, and campus server downtime as structural constraints that limit how reliably institutions can deliver information, independent of student attitudes. When servers fail during registration or power outages disable campus networks, official messages simply do not arrive on time, regardless of how attentive students are. The pattern documented in this study, then, reflects an institutional communication system that has not yet matched channel design to the urgency and complexity of postgraduate information needs, rather than a failure of student readiness, which Table 1 shows to be consistently high.

5. Conclusion and Recommendations

5.1 Conclusion

This study set out to establish which communication channels postgraduate students in federal universities in Nigeria's North-West zone prefer, and how effective they consider those channels to be. The findings show that students are broadly willing to engage with the full range of channels available to them, from digital platforms to physical meetings, and that this willingness follows a clear pattern: digital channels for speed and convenience, and richer, in-person or print-based channels for clarity and reassurance on matters that carry real academic weight. Set against this readiness, however, the perceived effectiveness of current institutional communication is weak, with the large majority of respondents dissatisfied with timeliness, accessibility, reliability, clarity, and suitability. The gap between what students are prepared to use and what the university system actually delivers is the central finding of this study, and it suggests that improving communication in these institutions is less a matter of introducing new channels than of managing the ones already in place more deliberately, and reinforcing the infrastructure that supports them.

5.2 Recommendations

To address students' clear preference for a hybrid communication approach, university leadership should adopt a structured policy that matches channel richness to message complexity rather than leaving the choice of channel to habit or convenience. Fast, low-complexity tools such as mobile portals, automated push notifications, and verified group messaging should be reserved for routine alerts and reminders, where speed matters more than nuance. Higher-stakes and more ambiguous communication—such as thesis guidelines, graduation clearance, and grievance resolution—should continue to rely on richer channels: dedicated postgraduate help desks, fixed office hours for face-to-face consultation, and official print notices used to reinforce digital messages rather than replace them. This dual-track approach would meet students' demand for speed on routine matters while preserving the clarity that complex academic processes require.

Universities also need to address the infrastructural weaknesses that undermine even well-designed communication policies. Campus IT units should move institutional portals to more resilient, cloud-backed hosting with low-bandwidth and SMS fallback options, so that access does not collapse during peak registration or clearance periods or during power and network outages. Administrative departments should complement this with clearer internal protocols—including defined response-time expectations for student enquiries and more deliberate scheduling of broadcast messages—to reduce the information fatigue that comes from unregulated bulk communication. Pairing infrastructural investment with better administrative discipline offers a more realistic path to reliable communication than either measure pursued on its own.

5.3 Limitations and Directions for Future Research

This study is limited in several respects that should guide how its findings are read and extended. First, the cross-sectional design captures postgraduate students' perceptions at a single point in time and cannot account for how these perceptions might shift across a research cycle—for example between admission, coursework, fieldwork, and thesis defence. Second, the data rely entirely on self-reported perceptions gathered through a structured questionnaire, which carries the usual risks of social desirability and recall bias and does not independently verify actual channel usage or the accuracy of official communications received. Third, the study is geographically restricted to six federal universities in the North-West zone of Nigeria, and its findings should not be generalised to postgraduate populations in other zones or to state and private universities, where infrastructural and administrative conditions may differ considerably. Future research could address these limitations through longitudinal designs that track perception over the course of a postgraduate programme, through mixed-methods approaches that combine survey data with interviews or channel-usage logs, and through comparative studies across geopolitical zones or institution types that would clarify how much of the pattern reported here is specific to the North-West zone as opposed to a broader feature of Nigerian postgraduate education.

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