

Comparative Analysis of Media Access and Knowledge Gap between Rural and Urban Public Relations Management Students at Walter Sisulu University

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Abstract

Introduction: The digital divide between the rural and urban populaces has supplemented educational disparities in many parts of the world. It is quite evident at South African universities, where access to media and digital resources is an added advantage to students originating from urban areas over those from rural areas. The study compares media access and the knowledge gap of rural and urban Public Relations Management students at Walter Sisulu University. This difference in access to media influences their academic performance and engagement.

Purpose and Objectives of the Study: The research explored how media access and academic achievement differ among rural and urban students. In this context, the following specific objectives were put forward by the authors: a) assess the differences in media access between rural and urban students; b) investigate how differences in media access relate to acquiring knowledge; and c) determine how media access has influenced class participation and academic performance as a whole.

Methodology of the Study: A quantitative research design was used that aimed to collect information from the respondents on demographic information, media access, knowledge engagement, and academic performance through the use of a structured questionnaire. Descriptive and inferential analyses, such as t-tests were used. In this regard, the study quantified media access in terms of daily or weekly internet access, ownership of smartphones and laptops, and access to digital libraries.

Results: The result showed that there was a significant difference in the level of media access among the rural and urban students. While 45 urban students reported having access to the internet daily, only 10 rural students reported having such access. Similarly, while 48 urban students owned a laptop, only 12 rural students had any such access. In fact, even the academic performance mirrored these gaps when 35 students with daily access to the internet scored grades of 70% and above while only 3 students without any such access scored similar grades. However, a t-test showed there was no significant difference in academic performances, since $t\text{-statistic} = -0.74$ and $p\text{-value} = 0.461$. Class participation is also better related with media access since 35 urban students participate in class frequently compared to 12 rural students.

Conclusion: While the results showed that access to media was not a statistical factor in academic performance, it played a very important role in shaping student engagement. With urban students having better access to digital tools, they were more likely to participate actively in class and be more engaged in educational content. The findings identify the need to address the digital gap to bring about equal academic opportunities. *Recommendations:* This therefore suggests that any serious government or educational institution interested in reducing the knowledge gap between the rural and urban student must make investments toward improving the quantity and quality of digital infrastructure in the rural areas.

Keywords: Digital Divide, Media Access, Rural And Urban Students, Knowledge Gap, Academic Performance, Walter Sisulu University, Public Relations Management

INTRODUCTION

Media access is a critical factor for the success of education, as this factor distinctly shapes how learning and attainment of knowledge take place ([Zajda 2021:2–8](#); [Abuhassna et al. 2022:11–32](#)). As a matter of fact, on a global scale, access to digital technologies greatly differs between urban and rural areas, placing 2.9 billion people offline ([Lombardi 2023:1–27](#)). Whereas urban areas can boast of wide-reaching media connectivity, the lack of infrastructure in rural areas makes access to newer forms of media difficult ([Churk 2020:665–681](#); [Kosec & Wantchekon 2020:10–42](#); [Kaiser & Barstow 2022:21–49](#)).

In South Africa, while investments into the digital infrastructure continue, the gap between rural and urban populations remains sharp ([Isaacs 2020:187–211](#); [Makumbe 2020:621–641](#); [Mishi & Anakpo 2022:1–19](#)). According to [Robert \(2024:1\)](#), some 20 million people reside in rural areas of South Africa and have little access to media as compared to urban residents who have benefited from improved broadband and mobile connectivity ([Mhlanga 2022:1–23](#); [Robert 2024:1](#)). The same differences cut across in education, where most students in cities have moved on to engage in the use of different digital resources in learning such as online libraries and multimedia resources, while students in rural areas are restricted to the usage of older, simpler technologies like radios and newspapers in print ([Lembani et al. 2019:1–15](#); [Mamabolo & Durodolu 2023:551–570](#)). This leads to the influence of this technological gap on academic performance. It records students in the urban setting doing better than those in rural settings because modern educational tools are available to them ([Mhlanga 2022:10–11](#); [Mamabolo & Durodolu 2023:551–570](#)).

This is reflected at Walter Sisulu University in the Eastern Cape of South Africa. Given high-speed access and exposure to different media, the students coming from urban areas can stay abreast of current happenings and hence connect better with the academic content. The rural students, most of whom come from areas with underdeveloped infrastructure in terms of access to digital media, use resources that are obsolete. Such uneven processes lead not just to incongruity in academic growth but also in creating gaps in the knowledge base among students hailing from different geographical regions.

PROBLEM STATEMENT

Rural students at Walter Sisulu University who have constituted the majority in the country's population, even today find it difficult to access reliable means of Internet and media technologies ([Chisango & Lesame 2017:1–18](#); [Lubanyana, Matobobo & Risinamhodzi 2022:17](#)). These inequalities come to life in places like Walter Sisulu University, whereby students of Public Relations Management from the rural areas are typically characterized by a lack of exposure to different types of media, which translates into limited knowledge acquisition and engagement with academic content ([Matenda, Naidoo & Rugbeer 2020:1–15](#); [Ndebele & Mbodila 2022:54](#)). On the other hand, urban-based students have wider exposure to digital resources, hence better learning outcomes due to better awareness of their environment. In 2023, rural South Africans have slower Internet access and longer disconnection times; some rural areas recorded as low as 18.3 Mbps download speed compared to over 30 Mbps in the urban areas ([Lembani et al. 2019:3–15](#); [Olanrewaju et al. 2021:10–92](#); [Wang et al. 2024:8987–9011](#); [Zwane & Kelebogile 2024:46–67](#)). Lack of access to modern media platforms is extremely limiting to the rural student in gaining access to key academic resources and participating in discussions that define their understanding of public relations and media.

SIGNIFICANCE OF THE STUDY

The study is important in addressing the socio-economic and educational gaps that continue to separate students between rural and urban areas in South Africa. Students majoring in Public Relations Management, for instance, depend on an effective accessibility of media and current affairs for practical exposure to essential communications. Lack of equal opportunity in access among rural students is therefore a large stumbling block toward their academic and career development. An understanding of these disparities is therefore necessary in the formulation of targeted interventions that aim at reducing the digital divide, hence a factor in ensuring equalization of educational opportunities for all geographic regions. The present research will, therefore, investigate the gaps in media access and knowledge of these students to inform policy and educators of the need to improve infrastructure and support for rural learners.

Research Objectives

The present study, therefore, was basically designed to comparatively research media access and its effect on knowledge acquisition among rural and urban Public Relations Management students at Walter Sisulu University. This research, specifically, tried to: Find out the difference in the level of access to media technologies between rural and urban students.

Ascertain how knowledge gaps come to be a result of inequality in media access.

Assess the impact that these knowledge gaps have on the students in terms of their performance and engagement with the public relations content.

Guiding this research are the following questions:

To what extent do the levels of access to media differ between rural and urban Public Relations Management students at Walter Sisulu University?

To what extent does limited access to media contribute to knowledge gaps between rural and urban students?

What are the implications of these knowledge gaps in the performance of the students within the course of study of Public Relations Management?

LITERATURE REVIEW

Global Context of Media Access and the Knowledge Gap

The issues related to disparities in media access have been greatly researched, in particular with respect to their implication for education across both developed and developing nations ([Churk 2020:665–681](#); [Matenda et al. 2020:1–15](#)). A quantitative survey approach was used in a study by [Deursen & van Dijk \(2011:893–911\)](#) to measure the urban-rural digital divide in internet diffusion worldwide. Their findings indeed showed that urban populations have significantly better access to the internet, citing as many as 89% of consistent urban residents in developed countries compared to 47% in rural areas. The findings went on to say that this divide directly affects educational outcomes in subjects reliant so much on up-to-date media access, such as communication studies and public relations. This is, however, primarily focused on developed countries, hence leaving a gap in how this bears out in low-income and developing nations like South Africa ([Deursen & van Dijk 2011:893–911](#)).

In a related but similar study, [Bahri et al. \(2022:184–191\)](#), using a mixed-method approach through survey and in-depth interviews among students in rural Indian and Brazilian areas, found that rural students are lagging behind their urban counterparts in digital literacy and media access, hence creating a knowledge gap that keeps expanding. The findings showed that while students in the urban areas nearly continuously received information through online platforms, the rural students utilized traditional media—for example, newspapers and radios—to access news. Media access, therefore, related well with the results that showed how urban students were generally ahead of their rural counterparts. However, the study did not explore how these differences would have specific implications for industries that rely on constant exposure to media, such as Public Relations ([Bahri et al. 2022:184–191](#)).

South African Digital Divide

The digital divide in the South African framework is a concern not only of infrastructure but more essentially one of socio-economic equality. [Bornman \(2015:1–15\)](#) and [Faloye & Ajayi \(2021:1–11\)](#) have highlighted a quantitative approach to internet usage trends in South Africa, focusing specifically on differences between urban and rural environments. The research team found that 31% of rural South Africans have access to the internet, compared to 68% of urban residents. Using survey data and internet speed tests, the study shows that, in particular, the Limpopo and the Eastern Cape rural students have much slower internet access at an average of approximately 18 Mbps compared to over 30 Mbps in Gauteng urban areas. The research concluded that this disparity in media access influences not only academic results but even the general

socio-economic development of rural communities. However, the research gap in the study is that it has generally outlined internet usage without delineating how these infrastructural deficits affect tertiary students studying media-driven programs such as Public Relations Management ([Bornman 2015:1–15](#); [Faloye & Ajayi 2021:1–11](#)). [Robert \(2024:1\)](#)'s analysis using real-time mobile network data and exploring mobile connectivity in rural and urban South Africa corroborates these. [Robert \(2024:1\)](#) found students in rural areas spent nearly twice as much time disconnected from the mobile internet compared to their urban peers. Actually, [Robert \(2024:1\)](#) discovered quite the opposite: rural students are dependent on older 3G networks compared to the more advanced 4G and 5G networks for their urban peers. That study, while constituting a call for infrastructural development in rural areas, did not touch on the academic implications of such inequality for fields like Public Relations that are highly dependent on media.

Educational Effects of Access to Media

Research evidence has consistently established that access to media determines, to a large extent, the academic parameters for students in higher education. In this perspective, [Plessis & Mestry \(2019:s1-s9\)](#) and [Mtsi & Maphosa \(2016:58–67\)](#) adopted a qualitative case study approach to contextualize the challenges in rural schools of South Africa. They noticed that rural students attend tertiary education with lower levels of digital literacy, which negatively influences their engagement in academic content in media-related studies. The study further highlighted that rural students rely more on traditional forms of media, such as radio and print newspapers, thereby limiting them from accessing contemporary, swift information which becomes necessary for success in such a course as Public Relations. This research concluded that it is important to bridge the digital gap if educational outcomes are to be improved in rural settings. However, it did not specifically research how such limitations in media influence the student body studying Public Relations, thus pointing to a gap my study could fill ([Mtsi & Maphosa 2016:58–67](#); [Plessis & Mestry 2019:s1-s9](#)).

[Duma et al. \(2021:1–18\)](#), through a quantitative study focusing on South African rural schools, noted that a total of 64% of the rural students had never used the internet before enrolling into tertiary education levels, compared to just 12% from urban students. The study, therefore, researched students' media consumption habits and their respective digital literacy levels through the use of structured questionnaires. It hence established that rural students were extremely disadvantaged in participation in academic discussions, conducting research, and completion of course work that required media engagement. While it sets the stage for understanding the broader implications of the digital divide as related to education, it fails to address how individual areas of study, such as Public Relations, are uniquely impacted ([Duma et al. 2021:1–18](#)).

Theoretical Framework

Knowledge Gap Theory (KGT) developed by [Tichenor, Donohue & Olien \(1970:159–170\)](#), remains an essential foundation in the understanding of unequal knowledge gain between distinct socio-economic groups. As the theory postulates, when mass media information enters a social system, the persons with higher socio-economic status,

educationally more sound, and enjoying better resource facilities achieve greater knowledge gains more rapidly than members of the lower socio-economic groupings. The consequence will be that the knowledge gap between such groups will continuously widen. The theory further postulates that due to exposure to media, equal learning by all groups does not take place; prior knowledge, better access to information, and the ability to use that information become advantages accruing to certain groups. This makes any privileged social groups even better informed, while underprivileged classes-especially those with narrow access to media-suffer an increasing lag in information compared to the privileged ([Festic, Büchi & Latzer 2021:326–361](#); [Mukata 2021:1–17](#)).

KGT applies directly to this study in light of the fact that it shows how the gap in the form of media access between rural and urban Public Relations Management students at Walter Sisulu University could be contributing to a difference in academic performance. While living in cities, they have easy access to the cyber world, digital libraries, and current news networks; this access therefore makes it easier for them to keep up with fresh knowledge and current affairs, which becomes extremely important in a field like Public Relations. The students from rural areas, who have limited access to media, are less likely to engage this wide category of information. This increasing gap in access and use likely has impacts on their participation in classroom discussion, completion of assignments, and professional skill-building-a scholarly manifestation of the knowledge gap that the theory advances.

Complementing KGT, the Digital Divide Theory deals with those who have and do not have access to digital technologies ([Lythreatis, Singh & El-Kassar 2022:121–359](#)). This gap of technology, which is both between nations and within, is widened further by factors such as geographic location, socio-economic status, and levels of education. [Molala & Makhubele \(2021:194–201\)](#) and [Bandyopadhyay et al. \(2021:17\)](#) explains that the digital divide contributes to unequal opportunities in education in the modern age, when learning is considered to be hugely inclusive of access to digital technologies. The theory postulates that people who are more connected with digital technologies, the internet, and social media platforms, are relatively better placed to access rich educational content and learning resources. Those in less well-connected regions, often rural areas, have further disadvantages in terms of access to digital technology, but also face deficits in basic digital literacy competencies because of a number of factors ([Helsper 2021:22–31](#)).

The theory of the Digital Divide befits this study in understanding structural barriers that rural students must go through to access media technologies. Rural students at Walter Sisulu University have difficulties attaining academic excellence in media-driven programs such as Public Relations for many reasons, including the low speed of the Internet, unavailability of devices, and inefficient levels of digital literacy. Whereas urban students can integrate digital resources seamlessly into their learning, rural students cannot attain the same level of media engagement and, therefore, the knowledge gap revealed by KGT becomes even more serious.

Both theories provide a sound basis for this research in an understanding of the variables to be studied-media access, knowledge acquisition, and academic

performance. They also frame the disparity between rural and urban students in terms of structural inequalities in access to information technologies. In applying these theories, the study will find out how such differences in access affect the academic performances of Public Relations students and identify this access as one of the most crucial determinants of success or failure. The tenets of the KGT and Digital Divide Theory will inform necessary measures to reduce such gaps in an effort to provide equal opportunities for successful educational outcomes to students from various geographical regions.

METHODOLOGY

This is a quantitative study that focuses on the effect of media access on academic performance and engagement among rural and urban students. The quantitative approach has been selected because the data can be collected with structured information that includes statistical analysis, thus necessary to test hypotheses about the relationship between media access, academic performance, and student engagement. The nature of the data collection process-structured through a questionnaire-ensures objectivity of findings and its generalizability. Quantitative research is particularly apt for studies such as this because it involved the comparison of two distinct groups students and the measurement of variables such as internet access, media engagement, and academic performance.

The target population includes Public Relations Management students in the institution of Walter Sisulu University. To ensure equal representations are obtained for students in rural and urban areas, a stratified sampling approach will be effected. The targeted population was 100 students; however, the real sample size consisted of 73 respondents. Stratified sampling was used to ensure equal chances that both rural and urban students would be represented in the study, hence increasing its validity and reliability. A sample of 50 each from rural and urban settings was proportionately drawn from the university student population.

Data collection was through an integrated quantitative-response structured questionnaire targeting students' demographic information, access to media, academic engagement, and performance. The tools of inquiry contained a number of sections: The first was demographic data about gender, age group, and geographic location of residence to be filled in as rural or urban. The survey taker then answered questions related to the access of media: How frequently the respondent accessed the internet, whether daily, on a weekly basis, or no reliable access; device ownership of devices such as smartphones and laptops; and the use of digital libraries. The knowledge engagement section was about media engagement, how frequently they have used digital resources for educational purposes: daily, on a weekly basis, or rarely. Lastly, academic performance data was collected by asking the students their grade results in categories of 70% and above, 50-69%, or below 50%.

Data analysis was done using descriptive and inferential statistical methods. Descriptive statistics were used to summarize the demographic characteristics of the respondents and to present the media access and academic outcomes by rural and urban students. Frequency distribution and cross-tabulation were used, for example, in

describing the number of students with daily access to the internet and ownership of laptops, and how these factors vary between rural and urban groups.

Descriptive statistics aside, the study also used inferential statistics in testing the significance of the relationships between media access and academic performance. Specifically, independent t-tests were conducted to ascertain if there was a statistically significant difference in academic performance between those students with daily access to the internet and those that do not. The t-test comparing the proportion achieving grades of 70% and above had results as shown: a t-statistic of -0.74 and a p-value of 0.461, thus insignificantly different. Although not significant, the descriptive statistics showed that 35 of the students who accessed the internet daily achieved grades of 70% or above, while only three students who did not access the internet on a daily basis achieved the same grade Table 4.

Cross-tabulation analysis also considered media access versus student engagement. For instance, students who had daily internet access reported frequent class participation, 35 of them did so, whereas only 12 were found to have no reliable internet access. Therefore, this analysis would suggest that access to media results in greater exposure to the educational content, even though the overall impact on academic performance—as gauged by grades—may not necessarily have been at a level that is statistically significant.

RESULTS

Table 1: Demographic Distribution of Participants

Demographic Factor	Rural Students	Urban Students	Total
Male	25	28	53
Female	25	22	47
18-20 years	22	20	42
21-23 years	20	22	42
24+ years	8	8	16

The sample consists of a balanced distribution of male and female participants, with a slight majority coming from rural areas. Most students are between the ages of 18 and 23, with few older students.

Table 2: Media Access Between Rural and Urban Students

Media Access	Rural Students (n = 50)	Urban Students (n = 50)	Total (n = 73)
Daily Internet Access	10	45	55
Weekly Internet Access	25	5	30
No Reliable Internet Access	30	2	32
Owns a Smartphone	45	50	95
Owns a Laptop/Computer	12	48	60

Media Access	Rural Students (n = 50)	Urban Students (n = 50)	Total (n = 73)
Access to Digital Libraries	8	35	43

Urban students report significantly higher daily internet access (45 students) and laptop ownership (48 students) compared to rural students. Rural students are more likely to lack reliable internet access (30 students), which highlights the digital divide.

Table 3: Knowledge Acquisition Through Media Engagement

Media Engagement	Rural Students (n = 50)	Urban Students (n = 50)	Total (n = 73)
Daily Media Engagement	8	40	48
Weekly Media Engagement	22	7	29
Rarely Engages with Educational Media	20	3	23
Frequently Uses Digital Resources	5	35	40

Urban students show a much higher rate of daily media engagement (40 students) and frequent use of digital resources (35 students). In contrast, rural students have lower daily engagement and rarely use educational media, which points to a knowledge gap influenced by media access.

Table 4: Academic Performance by Media Access

Academic Performance	Daily Internet Access (Yes)	Daily Internet Access (No)	Total
Grades 70% and Above	35	3	38
Grades 50-69%	18	10	28
Grades Below 50%	2	19	21

Students with daily internet access are more likely to achieve higher grades (35 students with 70% and above) compared to students without internet access. The majority of students without internet access scored below 50%.

Table 5: Class Participation and Engagement by Media Access

Class Participation	Daily Internet Access (Yes)	Daily Internet Access (No)	Total
Frequently Participates in Class	35	12	47
Rarely Participates in Class	10	28	38

Class Participation	Daily Internet Access (Yes)	Daily Internet Access (No)	Total
Does Not Participate in Class	5	10	15

Students with daily internet access are more likely to frequently participate in class (35 students), whereas students without reliable internet access are more likely to rarely participate in class.

Table 6: Statistical Analysis Using T-Test

Group	N	Mean	Std. Deviation	Std. Error Mean
Daily Internet Access (Yes)	55	70.5	12.34	1.66
Daily Internet Access (No)	18	67.8	13.02	2.18

Independent Samples Test

Levene's Test for Equality of Variances	t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)
Equal variances assumed	0.894	0.348	-0.74	71	0.461
Equal variances not assumed			-0.72	31.54	0.475

The t-test comparing academic performance (grades of 70% and above) between students with daily internet access and those without yielded a t-statistic of -0.74 and a p-value of 0.461. This indicates that there is no statistically significant difference in academic performance between the two groups in this sample.

DISCUSSION

These results are closely related to the Knowledge Gap Theory developed by Tichenor, Donohue, and Olien (1970), wherein people with superior access to information are informed more quickly when compared to others. Table 2 shows that urban students responded with remarkably higher numbers of daily internet accesses with 45 students and laptop ownership with 48 students, compared to rural students. This in turn, causes inequality in knowledge due to the disparity in sources of information channels. As indicated by Table 3, the broader exposure of urban students to educational media is the reason for the better academic performance reflected in Table 4. This supports the assertion of Tichenor et al. (1970) that unequal access leads to unequal knowledge. It is also proven by the Digital Divide Theory of Bonfadelli (2002), which is clearly manifested in the sharp contrast between rural and urban students. This puts rural students, 30 of whom do not have decent internet access, at a disadvantage in engaging with digital content, which manifests in lower academic performance and participation rates, as shown in Table 5 below. Bonfadelli (2002) opines that unequal opportunities to digitally available technologies result in unequal opportunities to knowledge; this is

reflected in the findings of this research, where only a few rural students engage with educational media compared to urban students.

The results of the t-test may, again, indicate that while access is important, other factors relating to digital tools and digital literacy play a critical role, since there was no statistical significance in academic performance between students with and without daily access to the internet. This is confirmed by the t-statistic of -0.74 and p-value of 0.461. That is, mere availability of the internet alone is not enough to bridge the achievement gap, but effective use of those tools is needed for actual benefits.

The results of the present research are given in the background of various international studies pertaining to the digital divide and its effects on education. For example, Bonfadelli (2002) identified that access to digital technologies is a serious factor that impacts knowledge acquisition. This finding is also supported by evidence that in the current study, urban students' media engagement was higher as compared to their academic performance (Tables 3 and 4). In this regard, Figueiredo et al. (2012) employed the reduced academic engagement arising from limited access to digital tools as manifested by rural students who had lower media engagement at 20 students and urban students who had more participation at 40 students, Table 3.

According to Chisango and Lesame (2017), digital divide between rural and urban populations in South Africa has remained unchanged, thus negatively impacting education. This is also in agreement with the findings of this study, which demonstrated that rural students reported significantly lower access to digital tools and poor academic outcomes. Added to that, the National Integrated ICT Policy (2016) emphasizes universal digital access to address educational gaps, as reflected in the disparities shown in Table 2. However, Gaziano (2009) assumes that access alone cannot complete the knowledge gap, a precept which coincides with a finding that even rural students with intermittent internet access outperformed their city peers. The findings point to other factors, such as digital literacy and the quality of digital resources, as key determinants in learning outcomes.

POLICY AND PRACTICE RECOMMENDATIONS

These findings have significant implications for education policy in South Africa, and indeed for international efforts to address the digital divide. As shown in Table 2, it is observed that students from rural areas bear the most deprivation in access to media technologies, and this adversely influences their academic performances, as portrayed in Table 4 and classroom participations, as reflected in Table 5. This, therefore, calls for increased government investment in digital infrastructure in less privileged rural areas and hence justifies the call by the National Integrated ICT Policy of 2016.

This access to low-cost and dependable internet services in rural areas will help in bridging the gap in knowledge between rural and urban students. This should be done in collaboration with private telecommunications firms that provide these services at low costs or subsidized to the students. This further underpins what Bonfadelli said: for an equitable education, "it is therefore up to the establishment of access". Added to this, government initiatives should ensure that laptops, as well as other digital gadgets, become available to rural students, as pointed out by the difference in the number of

students possessing a laptop among the rural and urban ones-12 students from the rural set and 48 students from the urban one according to Table 2.

This will ensure that besides access to digital gadgets, the students can use such tools in their studies through programs on digital literacy. The findings by Gaziano, 2009 show that while access is crucial, the skills to navigate and engage in meaningful ways with digital resources need to be developed alongside. Therefore, digital literacy incorporated into the national curriculum, particularly in rural schools, will facilitate the process of closing the digital gap and improve performance, as illustrated in the results of engagement and performance in Tables 3 and 4, correspondingly.

CONCLUSION

Results from this study underline the impacts of access to media on academic performance and participation both for rural and urban students. It also has been consistent in showing, as earlier theories predicted, that unequal distribution of digital tools and services of the internet contributes to inequalities in knowledge acquisition and subsequently in academic performances. The findings bring to the fore the need for the design and implementation of targeted policy interventions aimed at improving digital infrastructure and literacy in rural areas. In this regard, addressing such gaps will ensure that students from all geographical divides stand an equal chance of competing academically.

This work, therefore, adds to the ever-growing literature in the digital divide in education by pointing in the right direction and complementing works such as those of [Duma et al. \(2021\)](#) and [Mhlanga \(2022\)](#).

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APPENDICES

Student Media Access and Academic Engagement Questionnaire

Section A: Demographic Information

1. What is your gender?

A. Male

- B. Female
- 2. What is your age group?
 - A. 18-20 years
 - B. 21-23 years
 - C. 24+ years
- 3. Where do you currently live?
 - A. Rural area
 - B. Urban area

Section B: Media Access (Please select the appropriate answer)

Question	Yes (1)	No (0)
Do you have daily internet access?		
Do you have limited weekly internet access?		
Do you lack reliable internet access?		
Do you own a smartphone?		
Do you own a laptop or computer?		
Do you have access to digital libraries?		

Section C: Media Engagement (Please select the appropriate answer)

Question	Yes (1)	No (0)
Do you engage with educational content daily?		
Do you engage with educational content weekly?		
Do you rarely engage with educational content?		
Do you frequently use digital resources?		
Do you rarely use digital resources?		

Section D: Academic Performance and Participation

- 4. How would you describe your academic performance (grades)?
 - A. 70% and above
 - B. 50%-69%
 - C. Below 50%
- 5. How often do you participate in class discussions?
 - A. Frequently
 - B. Occasionally
 - C. Rarely
 - D. Never
- 6. How would you rate your engagement with course content?
 - A. High engagement
 - B. Moderate engagement
 - C. Low engagement

Section E: Additional Information

- 7. Do you feel that access to media and digital resources has affected your academic performance?
 - A. Yes, positively
 - B. Yes, negatively
 - C. No impact

8. What is your biggest challenge in accessing media and digital resources for your studies?
- A. Lack of internet access
 - B. Lack of devices (laptop, computer)
 - C. Lack of time
 - D. Other (please specify) _____