

# WhatsApp as a Tool to Facilitate Continued Adjustment of First Time Entering Students Into University During COVID–19 Lockdown Restrictions

Tshepo Rabotapi and Samson Matope

Walter Sisulu University, South Africa

[trabotapi@wsu.ac.za](mailto:trabotapi@wsu.ac.za)

[smatope@wsu.ac.za](mailto:smatope@wsu.ac.za)

<https://doi.org/10.34190/ejel.22.8.3405>

An open access article under [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/)

**Abstract:** The Covid-19 pandemic forced universities into emergency remote learning. For universities situated in a country where internet connectivity prices are high, network coverage is low, and most students live in rural areas, this presented a unique set of problems. One of the issues is that traditional orientations were face-to-face for first-time entering students (FTENS) at universities, and they had to be moved online due to lockdown restrictions and the desire to save the academic year. For the university concerned, this presented challenges in accessing students due to their low digital literacy skills and infrastructure limitations. The study employed a quantitative exploratory research approach to assess whether WhatsApp, a low-cost communication tool offering features like affordable data bundles, group creation, and accessibility, could facilitate student engagement and support during the COVID-19 lockdown at a rural university campus. The aim was to investigate if utilizing WhatsApp could foster a sense of belonging among students, potentially mitigating dropout rates and preventing students from falling behind. The hypothesis posited a positive correlation between using WhatsApp for academic support and student retention, ultimately leading to enhanced success rates. The study used the 'Academic Dropout Wheel, a theoretical framework developed by Naaman (2021), which identifies key factors contributing to academic dropout and provides strategies for intervention. The results of a quantitative questionnaire on 181 of the 2022 cohort of FTENS at the campus revealed that students felt more at ease, had a feeling of belonging and ownership of the university, and knew where to ask for help through the effective use of WhatsApp. This paper concludes that if professionally managed, WhatsApp can be an effective tool to facilitate continued adjustment and integration of FTENS into the university.

**Keywords:** WhatsApp, First-time entering students, e-Learning, Orientation, Student success, Academic dropout wheel

---

## 1. Introduction and Background

The Covid-19 pandemic forced universities into emergency remote learning. For universities situated in a country where internet connectivity prices are high, network coverage is low (Simamora, 2020; Tadesse & Muluye, 2020), and most students live in rural areas, this presents a unique set of problems. Transitioning from high school to a university can be a challenging experience for many students, particularly those entering a new academic atmosphere with greater autonomy and a higher workload (McMillan, 2013). Unlike high school, university students are expected to take greater responsibility for learning, manage their time, and set academic goals (Ayish & Deveci, 2019). This shift can be difficult for some students, especially those accustomed to receiving more guidance and support from their teachers and families.

The nature of learning and social integration of First Time Entering (FTENS) students into higher education can be effectively enhanced with social media in education. Iranmanesh et al. (2022) concur with Maphosa, Dube, and Jita (2020), who applaud WhatsApp as the most popular instant messaging technology that has created opportunities for online cooperation and teamwork among students in the university context. WhatsApp can serve as a platform for learners to share and construct knowledge by interacting on topics of interest, even when they are miles away from one another. It is also claimed that virtual writing via WhatsApp improves student writing skills (Issa & Alsaleem, 2014) and offers quick and easy access to links for study materials using a technology that students use even outside school hours (Bouhnik & Deshen, 2014). However, there has been less research on how WhatsApp could be used to integrate first-time entering students into the university.

WhatsApp has become a valuable tool for first-time entering students (FTENS) in South Africa as they navigate the challenges of adjusting to university life. These students from the institution where the study was conducted are primarily from rural areas and have limited access to digital literacies and resources (Duma et al., 2021), which can be a significant obstacle in their academic journey. An internal study conducted by Matope in 2018 at the same institution revealed that over 80% of students came from rural high schools. Data from the university

student tracking unit in 2023 also indicated that 90% are first-generation students. As such, they come to the university with low cultural capital, making them more vulnerable to onboarding challenges (Pendakur & Harper, 2023)

With COVID-19 lockdowns and restrictions, students had to study from home, making it challenging to access the social and academic support universities offer (Al-Maskari, Al-Riyami & Kunjumammed., 2022). However, WhatsApp became a crucial, easy-to-use tool for FTENS to stay connected to their peers, instructors, and support staff (Ajani & Khoalenyane, 2023). The affordability of social bundles given to students by the university monthly meant that students could access the app at a lower cost. Thus, WhatsApp has become a popular and accessible platform for communication and collaboration.

Entry-level smartphones taunt WhatsApp as a central feature, and 90% of South Africans accessing smartphones (Miyajima, 2020) makes WhatsApp a low-level access tool. The advantage of WhatsApp is that one does not need a sophisticated, costly smartphone. There are many versions of cheaper smartphones on which WhatsApp can be downloaded (Maniar & Modi, 2014; Udenze, 2017). The app's group creation feature, which allows for up to 250 participants, is precious for FTENS as it enables them to form study groups, connect with their peers, and seek academic support from their advisors and mentors. Additionally, WhatsApp is easy to use and widely available, making it an excellent choice for students who may not be tech-savvy.

University dropout rates in South Africa are high, with estimates of 90% (Moodley & Singh, 2015). To help address these challenges, universities have developed programs to support student success. The student success unit at the University in this study, under the Directorate of Learning and Teaching and the Student Development and Support Services Directorate, provides psychosocial support through sports and recreation, counseling, and other mentoring programs. This study explores whether using WhatsApp for student academic support in a rural university, with affordable data and group features during the COVID lockdown, can foster a sense of belonging and potentially reduce dropout rates. The study answers the following research questions: Did students perceive a sense of belonging to the university through their interactions on WhatsApp? Were students able to identify and join extracurricular activities based on information shared within WhatsApp groups? Did students feel that WhatsApp assisted in improving their academic performance and satisfaction? According to the students, how effective was the WhatsApp group in providing academic support?

This paper shows how WhatsApp was used at a rural university to create feelings of social and academic integration even though students were distant. It continued orientating the students into campus life after lockdown restrictions were eased.

## **2. Literature Review**

### **2.1 Using WhatsApp in Teaching and Learning**

Research on the use of WhatsApp in teaching and learning has shown its potential to enhance communication and interaction between students and lecturers (UJAKPA et al., 2018). It has also been helpful in higher education institutions, promoting tech-savviness and student self-expression (Enakrire & Kehinde, 2022). WhatsApp's features can be leveraged in English language teaching to improve students' language abilities (Jasrial, 2019). However, the successful use of WhatsApp in teaching and learning is contingent on the establishment of clear rules of engagement and group ownership (Gachago et al., 2015)

### **2.2 Building a Sense of Belonging Using WhatsApp**

First-year students bring several issues with them to university. Naong et al. (2009) from their study revealed that language of instruction, amount of work, time management skills, independence levels, and lack of family support could add to the existing anxiety. Strydom & Mentz (2009) state that first-year orientation allows new students to become familiar with the university environment and resources, meet other students and learn about university life's academic and social expectations. Maunder (2018) found that how students were attached to their peers directly correlated to the feeling of belonging to the university; the more they are attached, the more they feel attached, and vice versa. Soria & Stubblefield (2015) articulate that belonging increases retention at school, with Dixon (2018) and Fabris et al. (2023) exclaiming how WhatsApp increases a feeling of belonging to a community with a common cause.

### **2.3 WhatsApp Helps Students Adjust to University Life**

Many studies have highlighted the benefits of first-year orientation programs in helping students adjust to university life. Evensen (2017) and Larmar and Ingamells (2010) emphasize orientation programs' role in

providing information about campus resources and support services and creating a sense of community and belonging. Pickard and Brunton (2020) further underscore the importance of social group development in aiding the transition to university, a factor often facilitated by orientation programs. Wintre and Yaffe (2000) add a unique perspective by exploring the influence of students' relationships with their parents on their adjustment to university, suggesting that these relationships can also play a significant role in the transition process.

**2.4 Orientation Helps Students to Learn About Academic Expectations**

First-year orientation programs play a crucial role in helping students understand the academic expectations of the university (M. Evensen, 2019; Olani, 2009). These programs provide a platform for students to familiarize themselves with campus life, interact with faculty, and learn about the differences between high school and university expectations (M. Evensen, 2019). Transitioning from high school to university can be challenging, and students often have unrealistic expectations about university life (Mcphail, Fisher & Mcconachie, 2009). Therefore, orientation programs must address these misconceptions and provide students with the necessary information to succeed academically (Crozier, 2021).

Orientation programs are crucial in helping students transition into the higher education environment and feel connected to the university community (Robinson et al., 1996). This is particularly important in online learning, where orientation materials can significantly impact student success (Tomei et al., 2009). Furthermore, orientation programs can also provide opportunities for students to engage with the university and their peers, leading to a sense of belonging and investment in their education (Altschwager, Dolan & Conduit, 2018).

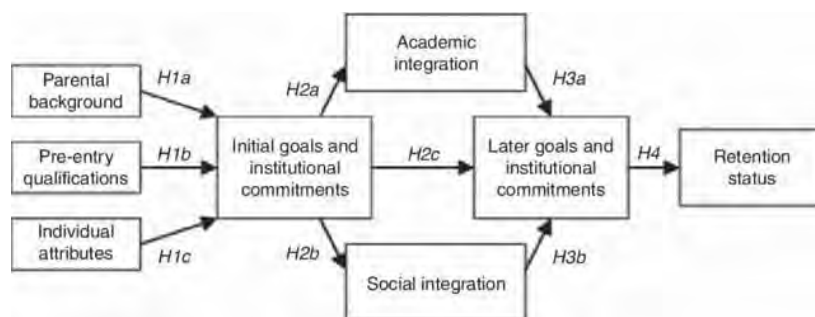
This study's student success unit at the University is based on collaboration between academic support, psychosocial support, and faculty. It plans and executes orientation programs and provides psychological and social support through sports and recreation, counseling, and other mentoring programs. The unit also addresses academic support needs through interventions such as writing assistance, digital literacies, academic advising, and other peer assistance programs such as residence, health, and eLearning.

**3. Theoretical Framework**

The study is underpinned by Tinto's Integration theory of 1993 and Naaman's (2018) Dimensions of Academic Dropout" wheel. These underscore the need to use WhatsApp to introduce the FTENs to the university culture, vision, and mission by creating a sense of belonging and confidence in the new academic space. These are discussed below.

**3.1 Tinto's (1993) Integration Theory**

Numerous studies show that student support can reduce the dropout rates of students, with Chryssikos, Ahmed & Ward (2017) explaining Vincent Tinto's (1993) model as identifying three significant sources of student departure: academic difficulties, the inability of individuals to resolve their educational and occupational goals, and their failure to become or remain incorporated in the intellectual and social life of the institution. Tinto's "Model of Institutional Departure," shown in Figure 1, states that to persist, students need integration into formal (academic performance) and informal (faculty/staff interactions) academic systems and formal (extracurricular activities) and informal (peer-group interactions) social systems.



**Figure 1: The initial student integration model is based on Tinto's (1993) student integration theory**

**3.2 Naaman's (2018) Dimensions of "Academic Dropout Wheel"**

Naaman (2018) Examined factors influencing the student-institution relationship that could potentially contribute to dropout occurrences and created the "academic dropout" wheel. The model has five (5) layers speaking to each dimension.

1. **Personality:** This embodies the primary traits developed during the early stages of a student's life and is influenced by all other dimensions; hence, it is at the model's core. Tosevski et al. (2010) state that personality traits are strongly linked to the coping styles individuals adopt in navigating the challenges of everyday life, and McLaughlin, Moutray, Muldoon et al. (2008) also confirmed that despite certain personality traits being predisposed to dropping out, retention can be built by encouraging integration among students.
2. **Internal dimensions:** Inherent physical and psychological aspects of a student that are beyond their control can lead to prejudgments from others based on visible characteristics.
3. **External dimensions:** Most aspects are controllable and refer to a student's relationship with the outside world and affect people's career choices and connections.
4. **Academic dimensions:** An additional layer to the original model of Gardenswartz & Rowe (2009). They include the academic features that distinguish one student from another.
5. **Organizational dimensions:** A layer representing all the institution's cultural aspects that can directly affect the student's academic trajectory and influence how people are treated and their development within the organization.

This paper seeks to answer whether WhatsApp can be used as an orientation tool to impact the academic dimension of the dropout wheel. The Academic includes researching library (Brown, 2015) topics, attending labs and classes, and engaging in various activities related to academic success (Bekkering & Ward, 2021). It is divided into extra-curricular and co-curricular participation, feeling of belonging, and academic integration, performance, and satisfaction.

### *3.2.1 Feeling of belonging*

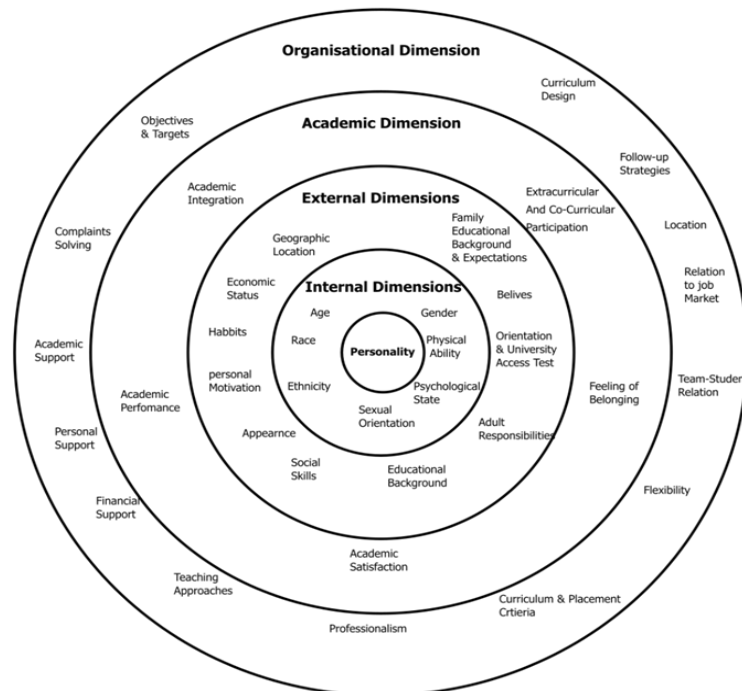
The feeling of belonging, defined as the extent to which students feel accepted, respected, included, and supported, is crucial in preventing academic dropout (Pedler, Willis & Nieuwoudt, 2022; Stojanović & Popović-Ćitić, 2022). This sense of belonging is linked to various positive outcomes, including academic achievement, motivation, and engagement (Tomić, Stojanović, & Antović., 2022). In higher education, a strong sense of belonging is associated with higher motivation and enjoyment, which in turn can reduce the likelihood of dropout (Pedler, Willis, & Nieuwoudt., 2022). Naaman's (2018) Academic Dropout Wheel identifies dissatisfaction with the program and academic failure as critical antecedents of higher education dropout, suggesting that a lack of belonging may contribute to these factors. Goodenow (1993) further supports the importance of school belonging, finding that it is significantly associated with academic motivation among urban adolescent students. Therefore, fostering a sense of belonging is crucial in preventing student dropout.

### *3.2.2 Extra-curricular and co-curricular participation*

Research has consistently shown the importance of extra-curricular and co-curricular activities in preventing student dropouts. Marcelino-Jesus et al. (2016) emphasizes the role of academic centers and initiatives in helping students adapt to academic life. Mahoney (1997) found that involvement in school-based extracurricular activities significantly reduced the dropout rate among at-risk students. Naaman (2021) further underscores the significance of these activities, identifying dissatisfaction with the program and academic failure as critical antecedents of higher education dropout. Manzuoli Pineda-Báez, & Vargas Sánchez. (2019) highlight the need for students to engage in activities that enhance their cognitive and agentic dimensions, which can be achieved through participation in extra-curricular and co-curricular activities.

### *3.2.3 Academic performance and satisfaction*

Academic performance and satisfaction are critical factors in student dropout, as highlighted by Naaman (2018) and supported by Quadri (2010), Stinebrickner (2013), and Suhre, Jansen, & Harskamp,. (2007). Naaman's "Dimensions of Academic Dropout" wheel, as in Figure 2 below, identifies dissatisfaction with the program and academic failure as significant antecedents of higher education dropout. This is further underscored by Quadri's use of data mining to predict dropout, which found that academic performance is critical. Stinebrickner's (2013) dynamic learning model of college dropout also emphasizes the role of academic performance, with poor performance leading to decreased enjoyment of school and influencing beliefs about post-college earnings. Suhre, Jansen, & Harskamp's , study on degree program satisfaction further supports this, showing that decreased satisfaction can diminish study motivation and behavior, ultimately impacting academic accomplishment and dropout. Therefore, understanding and addressing academic performance and satisfaction are crucial in preventing student dropouts.



**Figure 2: Academic Dropout Wheel (adapted from Naaman, 2021)**

WhatsApp, a low-cost digital application, can integrate first-year students as soon as they are admitted and registered by the university. In this study, students were registered in the first-year students' group, where the eLearning administrator shared information about the university. Through this, an educational environment was created by creating multiple sources with simulations of the university context. This helps alleviate the fears and anxiety of first-year students who have no prior knowledge of university life from their families. This low cultural capital of first-year students is one primary source of anxiety for undergraduate students during their first year in university.

#### 4. Research Methodology

The study employed a quantitative research approach. An open-ended questionnaire on a Likert scale was used to collect data to generate tables and graphs. Data was collected from a sample of 181 FTENs. Five WhatsApp groups were created for first-time students entering the campus level; the links were sent to phone numbers of students who applied to the university. Every student was sent a link to a group associated with their study department, with an option to leave should there be a mix-up. The administrator of the groups is the campus eLearning administrator, who communicates official, just-in-time messages to first-time entering students and interventions by the Directorate of Teaching and Learning, Student Success Team. The questionnaire was sent to all groups towards the year's end to gauge their effectiveness concerning the research questions. The questionnaire was sent to a senior researcher in the department for critical review before they were used to collect data. This was done to ensure that the questions measured what they were expected to measure regarding addressing the sub-research questions.

Before data collection, the university gave the researchers ethical clearance, allowing them to collect data from the students. The students sampled to participate in the study were issued a consent form where the ethical concerns were addressed. The students were informed that they could withdraw from the study if they felt their rights were being violated.

The academic dropout wheel's academic dimensions (Naaman, 2021) are used to create interventions that seek to improve the feeling of belonging, academic satisfaction, integration, and performance, and when lockdowns eased to allow the promotion of extracurricular activities. A questionnaire was drafted using a 7-point agreeableness Linkert scale; the nature of the data is qualitative; however, Linkert scales transform attitude and perception data into qualitative data (Deramo, 2009) by asking the respondents to choose the extent to which they agree or disagree.



## 5. Data Presentation

### 5.1 First Question: Biographical Background

One hundred and eighty-one (181) FTENs responded to the questionnaire; 116 responded as female, 63 as Male, one as non-binary, and one preferred not to say. One hundred and forty-one students responded as being accommodated in residences, 35 rented off-campus, and five lived at home; 67 indicated having family, friends, or people they knew around the campus city before coming to this campus, and 114 knew no one, 99 students stated that they have a good internet connection and 82 without.

On the issue of funding, one hundred and fifty-five (155) of the National Student Financial Scheme funded students; 6 had bursaries, and 20 were self-funded. One hundred eighty indicated having a laptop or cellphone, and only one indicated not having either. One hundred and forty-five participants indicated they were in WhatsApp groups created by the campus's Directorate of Learning and Teaching. They also indicated that they had a chance to interact with their peers through the WhatsApp platform before coming to the university. They also indicated that they had a chance to interact with their peers through the WhatsApp platform before coming to the university. This indicates that fourteen (14) of the FTENS who participated in the study were either not on WhatsApp or, therefore, had not yet joined the group. Thus, they did not benefit from the activities and information sharing with their peers.

### 5.2 Feeling a Sense of Belonging

For the second question, from the dropout wheel, we asked five questions to check if the students felt they belonged in the university because of WhatsApp interactions. The first question was, "I felt welcomed at the university since I joined the WhatsApp groups," The second question was, "WhatsApp groups help you to feel connected to academic support (eLearning, Pals, academic advising)" the third question from WhatsApp groups, "I feel that people at DLT (Directorate of Learning and Teaching) understand me as a person," forth question was, "I have made positive relationships with my peers from the WhatsApp groups," and the fifth question was "The DLT WhatsApp groups are a safe, trustable space."

The survey results in Table 1: Responses on feeling of belonging indicate diverse sentiments among respondents regarding their experiences with WhatsApp groups at the university. In response to Sub-Question 1, a substantial number (65%) feel generally welcomed through their participation in WhatsApp groups, yet a significant 25% adopt a neutral stance, neither agreeing nor disagreeing. For Question 2, a majority (82%) acknowledges the positive contribution of WhatsApp groups to their connection with academic support, presenting a generally favorable outlook, with only a minor percentage expressing disagreement. Moving to Question 3, a significant portion (64%) believe that individuals at the Directorate of Learning and Teaching (DLT) understand them through WhatsApp groups; however, a notable 25% remain neutral. Regarding Question 4, a majority (76%) reports cultivating positive relationships with peers through WhatsApp groups, while a smaller percentage expresses disagreement or neutrality. Finally, in Question 5, while a majority (66%) considers DLT WhatsApp groups safe and trustworthy, about one-fourth of respondents express some level of disagreement or neutrality, suggesting a varied perception of the reliability and security of these platforms. These findings collectively reflect a mix of positive experiences and areas where respondents adopt neutral or differing stances, emphasizing the need for nuanced strategies to enhance engagement and satisfaction within the university's WhatsApp group environment.

**Table 1: Responses on feeling of belonging**

Agreeableness	Sub-Q1(N)	Sub-Q2(N)	Sub-Q3(N)	Sub-Q4(N)	Sub-Q5(N)
<b>Strongly agree</b>	46	67	16	32	39
<b>Agree</b>	77	76	70	82	83
<b>Somewhat agree</b>	14	11	29	29	21
<b>Neither agree or disagree</b>	17	6	25	6	11
<b>Somewhat disagree</b>	6	4	5	5	4
<b>Disagree</b>	8	1	19	12	9
<b>Strongly disagree</b>	1	4	5	3	2

### 5.3 Extra-Curricular Participation Through WhatsApp

The third question was to check if students could identify and join extracurricular activities from the information shared on WhatsApp. It had two sub-questions. The first one asked if WhatsApp groups helped me find school events and activities quickly, and Sub-question 2 joined extra-curricular activities from WhatsApp group postings.

The survey results in Table 2 underscore a positive sentiment among most respondents regarding the role of WhatsApp groups in facilitating engagement with school events and extracurricular activities. An overwhelming 87% of respondents express that WhatsApp groups have been instrumental in helping them quickly discover school events and activities, with only a tiny percentage indicating disagreement or neutrality. Similarly, a majority of 84% of respondents report having successfully joined extracurricular activities through WhatsApp group postings. Despite a minor percentage expressing disagreement or neutrality, the overall sentiment remains positive. These findings collectively suggest that WhatsApp groups are valuable in connecting students with school-related events and extracurricular opportunities, contributing to a positive and inclusive university experience. Most of the evidence points to the importance of WhatsApp groups in helping students develop a feeling of belonging. Students from various backgrounds can get to know and support one another as they acclimate to the new atmosphere of higher education through social mixings. This fosters a strong sense of belonging and a sense of acceptance.

**Table 2: Responses on extracurricular participation through WhatsApp**

Agreeableness	Sub-Q1(N)	Sub-Q2(N)
Strongly agree	56	31
Agree	86	78
Somewhat agree	13	10
Neither agree nor disagree	5	8
Somewhat disagree	2	3
Disagree	2	33
Strongly disagree	5	6

### 5.4 Contribution of WhatsApp to Academic Performance and Satisfaction of Students

The fourth question was to see if the students of WhatsApp assisted with their academic performance and satisfaction. It had three sub-questions: number, one was whether WhatsApp group assistance helped them to perform better in class, whether WhatsApp groups helped them find their way around the university, and the third asked if they got valuable information about the class from WhatsApp groups.

The survey results in Table 3 reveal a strong positive sentiment among respondents regarding the impact of WhatsApp groups on their academic performance. A significant majority (83%) believe these groups have contributed to their success in class, with only a tiny percentage expressing disagreement or neutrality. Furthermore, most (81%) of students feel that WhatsApp groups have played a positive role in helping them navigate the university environment, even though there is a slightly higher percentage of disagreement than in the first sub-question. The overwhelming majority (90%) believe they have received valuable information about their classes from WhatsApp groups, and the percentage of disagreement or neutrality in this aspect is notably low. In summary, the findings suggest that, overall, students perceive WhatsApp groups as beneficial tools for both academic success and navigating the university experience, with a powerful impact on information dissemination.

**Table 3: Responses on the contribution of WhatsApp to academic performance and satisfaction of students**

Agreeableness	Sub-Q1(N)	Sub-Q2(N)	Sub-Q3(N)
Strongly agree	34	32	60
Agree	81	92	85
Somewhat agree	23	18	12
Neither agree nor disagree	11	3	3

<b>Somewhat disagree</b>	4	2	2
<b>Disagree</b>	12	15	2
<b>Strongly disagree</b>	4	7	5

### 5.5 Academic Integration of Students Using WhatsApp.

Most students (75%) express confidence in finding valuable academic support through WhatsApp groups, although a noticeable percentage indicates disagreement or neutrality. The overall sentiment remains positive. Similarly, Table 4 shows a comparable majority (76%) believe in the freedom to express themselves openly within WhatsApp groups, with percentages for disagreement, somewhat disagreement, and neutrality aligning with the first sub-question. Moreover, an overwhelming majority (87%) of students feel that WhatsApp groups played a significant role in helping them adjust to university studies, and the percentage of disagreement or neutrality in this regard is comparatively low. These findings collectively suggest that students perceive WhatsApp groups as valuable platforms for academic support and self-expression and for facilitating the adjustment to the challenges of university studies.

**Table 4: Responses on academic integration of students using WhatsApp**

<b>Agreeableness</b>	<b>Sub-Q1(N)</b>	<b>Sub-Q2(N)</b>	<b>Sub-Q3(N)</b>
<b>Strongly agree</b>	38	26	36
<b>Agree</b>	83	69	90
<b>Somewhat agree</b>	20	20	21
<b>Neither agree nor disagree</b>	13	11	4
<b>Somewhat disagree</b>	2	6	4
<b>Disagree</b>	8	30	10
<b>Strongly disagree</b>	5	7	4

## 6. Discussion of Findings

Higher education institutions can benefit from using social media tools like WhatsApp to extend the orientation of first years to a longer period. The results show that the groups increased their feeling of belonging to the university students and their knowledge and trust of the various academic support units. The information shared on social media tools assists in joining the students in co-curricular activities, which helps integrate them more into the university. Students can adjust to university and perform better when freely expressing themselves in various classes. This includes getting class times and clarifying content.

Tinto's "Model of Institutional Departure" states that to persist, students need integration into formal (academic performance) and informal (faculty/staff interactions) academic systems and formal (extracurricular activities) and informal (peer-group interactions) social systems. In higher education, a strong sense of belonging is associated with higher motivation and enjoyment, which in turn can reduce the likelihood of dropout (Pedler, Willis & Nieuwoudt 2022). Naaman's (2018) Academic Dropout Wheel identifies dissatisfaction with the program and academic failure as critical antecedents of higher education dropout, suggesting that a lack of belonging may contribute to these factors. Goodenow (1993) further supports the importance of school belonging, finding that it is significantly associated with academic motivation among urban adolescent students. Therefore, fostering a sense of belonging is crucial in preventing student dropout. Manzuoli, Pineda-Báez & Vargas Sánchez (2019) highlight the need for students to engage in activities that enhance their cognitive and agentic dimensions, which can be achieved through participation in extra-curricular and co-curricular activities. Stinebrickner's (2013) dynamic learning model of college dropout also emphasizes the role of academic performance, with poor performance leading to decreased enjoyment of school and influencing beliefs about post-college earnings. Suhre, Jansen, & Harskamp's study on degree program satisfaction further supports this, showing that decreased satisfaction can diminish study motivation and behavior, ultimately impacting academic accomplishment and dropout.

The study also noted that some students were not on the WhatsApp group. This indicates that fourteen (14) of the FTENS who participated in the study were either not on WhatsApp or had not yet joined the group. Thus, they were not benefiting from their peers' activities and information sharing. The study, however, did not collect data on why these students did not have smartphones or were not on the FTENS WhatsApp group. Lastly,



support for e-learning practice was indirectly addressed by indicating the use of WhatsApp in helping first-time entering students adjust to university courses and life as university students.

## **7. Recommendations and Conclusion**

Orientation is a critical time for FTENS, as it allows them to become familiar with the university environment and meet their peers and lecturers. However, limiting orientation to just one or two weeks at the beginning of the academic year is not enough. As Strydom & Mentz (2009) recommend, orientation should be a program spread throughout the first year of study to ensure that FTENS receive the support they need to adjust to university life.

Implementing such strategies should be intentional, using student profiles to push interventions to FTENS and continually check for quality. This means universities should thoroughly understand their FTENS' needs, challenges, and aspirations and use this information to provide targeted and practical support. However, the findings from the data show that students generally feel that WhatsApp can be used as a tool to increase student integration or onboarding into the new university life.

Universities should investigate the future affordances of social apps and include them in future interventions. WhatsApp is a versatile social app platform that can be used for various purposes, from communication and collaboration to resource-sharing and support. By keeping up with the latest developments in the app, universities can ensure that they are using it to its fullest potential to support their FTENS.

WhatsApp as a tool for extending orientation to FTENS beyond the traditional one or two-week period has been identified as a potential solution to some of the challenges faced by first-time entering students (FTENS) in higher education institutions. The use of WhatsApp can increase the feeling of academic belonging among students, which can reduce the likelihood of dropping out. Furthermore, the integration of higher education can benefit significantly from using WhatsApp and other instant messaging apps.

One of the limitations of using WhatsApp for institutional purposes is that there is no way to link student numbers to phone numbers for student tracking and monitoring. However, group mentality and the enhanced spirit of community can be observed, as students who have never met before can coordinate bus trips, trustable taxis, wait for each other in town, non-residence students can find places to stay, give each other directions and advice, and researchers can monitor all of this. In addition, students could join sub-groups for their modules, and lecturers could find students to join their WhatsApp groups by posting links on this group. High-risk events such as strikes, missing students, lost phones/bags, etc., were quickly resolved through the app. The study acknowledges that there is a scarcity of research on using WhatsApp as a tool for integrating first-year students into the university. The study thus will contribute to the body of research and might incite more research on the topic.

### **Data Protection and Ethical Review**

Under the Data Protection Act, the researcher anonymized the information held on students, including contact details. The students were asked on WhatsApp before answering the form for permission to be involved in the research and for their information to be used; answering the form meant the student consented. The informed consent form was a statement that the students were free to withdraw from the study at any time if they thought their rights were being infringed upon. One hundred and eighty-one (181) students out of a potential 600 various FTEN WhatsApp groups responded positively to the message.

## **References**

- Ajani, O. A., & Khoalenyane, N. B. (2023). USING WHATSAPP AS A TOOL OF LEARNING: A SYSTEMIC LITERATURE REVIEW OF PROSPECTS AND CHALLENGES. *International Journal of Innovative Technologies in Social Science*, 3(39). [https://doi.org/10.31435/rsglobal\\_ijitss/30092023/8025](https://doi.org/10.31435/rsglobal_ijitss/30092023/8025)
- Al-Maskari, A., Al-Riyami, T., & Kunjumammed, S. K. (2022). Students academic and social concerns during COVID-19 pandemic. *Education and Information Technologies*, 27(1), 1–21. <https://doi.org/10.1007/s10639-021-10592-2>
- Altschwager, T., Dolan, R., & Conduit, J. (2018). Social Brand Engagement: How Orientation Events Engage Students with the University. *Australasian Marketing Journal*, 26(2), 83–91. <https://doi.org/10.1016/j.ausmj.2018.04.004>
- Ayish, N., & Deveci, T. (2019). Student Perceptions of Responsibility for Their Own Learning and for Supporting Peers' Learning in a Project-based Learning Environment. *International Journal of Teaching and Learning in Higher Education*, 31(2), 224–237. <http://www.isetl.org/ijtlhe/>
- Bekkering, E., & Ward, T. (2021). Class Participation and Student Performance: A Follow-up Study. In *Information Systems Education Journal (ISEDJ)* (Vol. 19, Issue 4). <https://isedj.org/>; <https://iscap.info>
- Bouhnik, D., & Deshen, M. (2014). WhatsApp Goes to School: Mobile Instant Messaging between Teachers and Students. *Journal of Information Technology Education: Research*, 13, 217–231. <https://doi.org/10.28945/2051>

- Brown, C. (2015). *The uses of information and communication ( ICT ) in teaching and learning in South African higher education practices in the Western Cape Czerniewicz , L . & Brown , C . ( 2005 ). Information and Communication Technology ( ICT ) use in teaching and learn. January.*
- Chrysikos, A., Ahmed, E., & Ward, R. (2017). Analysis of Tinto's student integration theory in first-year undergraduate computing students of a UK higher education institution. *International Journal of Comparative Education and Development*, 19(2/3), 97–121. <https://doi.org/10.1108/IJCED-10-2016-0019>
- Crozier, N. (2021). *Designing Effective Online Orientation Programs for First-Year University Students.*
- Dermo, J. (2009). e-Assessment and the student learning experience: A survey of student perceptions of e-assessment. *British Journal of Educational Technology*, 40(2), 203–214. <https://doi.org/10.1111/j.1467-8535.2008.00915.x>
- Dixon, N. (2018). Stranger-ness and Belonging in a Neighbourhood WhatsApp Group. *Open Cultural Studies*, 1(1), 493–503. <https://doi.org/10.1515/culture-2017-0046>
- Duma, N. M., Mlambo, S., Mbambo-Mkwanazi, S., & Morgan, W. (2021). Digital Inequalities in Rural Schools in South Africa. In *Open Science Journal* (Vol. 6, Issue 3).
- Enakrire, R. T., & Kehinde, F. J. (2022). WhatsApp application for teaching and learning in higher education institutions. *Library Hi Tech News*. <https://doi.org/10.1108/LHTN-07-2022-0088>
- Evensen, K. (2017). *Benefits and Level of Satisfaction a First-Year Orientation Benefits and Level of Satisfaction a First-Year Orientation Program Delivers for Freshmen in College Program Delivers for Freshmen in College.* <https://pillars.taylor.edu/mahe/92>
- Evensen, M. (2019). Adolescent Mental Health Problems, Behaviour Penalties, and Distributional Variation in Educational Achievement. *European Sociological Review*, 35(4), 474–490. <https://doi.org/10.1093/esr/jcz015>
- Fabris, M. A., Settanni, M., Longobardi, C., & Marengo, D. (2023). Sense of Belonging at School and on Social Media in Adolescence: Associations with Educational Achievement and Psychosocial Maladjustment. *Child Psychiatry & Human Development*. <https://doi.org/10.1007/s10578-023-01516-x>
- Gachago, D., Strydom, S., Hanekom, P., Simons, S., & Walters, S. (2015). CROSSING BOUNDARIES: LECTURERS' PERSPECTIVES ON THE USE OF WHATSAPP TO SUPPORT TEACHING AND LEARNING IN HIGHER EDUCATION. *Progressio: South African Journal for Open and Distance Learning Practice*, 37(1). <https://doi.org/10.25159/0256-8853/579>
- Gardenswartz, L., & Rowe, A. (2009). The Effective Management of Cultural Diversity. In *Contemporary Leadership and Intercultural Competence: Exploring the Cross-Cultural Dynamics within Organizations* (pp. 35–44). SAGE Publications, Inc. <https://doi.org/10.4135/9781452274942.n4>
- Goodenow, C., & Grady, K. E. (1993). The Relationship of School Belonging and Friends' Values to Academic Motivation Among Urban Adolescent Students. *The Journal of Experimental Education*, 62(1), 60–71. <https://doi.org/10.1080/00220973.1993.9943831>
- Iranmanesh, M., Annamalai, N., Kumar, K. M., & Foroughi, B. (2022). Explaining student loyalty towards using WhatsApp in higher education: an extension of the IS success model. *The Electronic Library*, 40(3), 196–220. <https://doi.org/10.1108/EL-08-2021-0161>
- Issa, B., & Alsaleem, A. (2014). *The Effect of "WhatsApp" Electronic Dialogue Journaling on Improving Writing Vocabulary Word Choice and Voice of EFL Undergraduate Saudi Students.* [https://www.21caf.org/uploads/1/3/5/2/13527682/alsaleem-hrd-conference\\_proceedings.pdf](https://www.21caf.org/uploads/1/3/5/2/13527682/alsaleem-hrd-conference_proceedings.pdf)
- Jasrial, D. (2019). *UTILIZING WHATSAPP APPLICATION FOR TEACHING ENGLISH LANGUAGE: WHY AND HOW?* <https://api.semanticscholar.org/CorpusID:199584259>
- Larmar, S., & Ingamells, A. (2010). Enhancing the first-year university experience: Linking university orientation and engagement strategies to student connectivity and capability. *Research in Comparative and International Education*, 5(2), 210–223. <https://doi.org/10.2304/rcie.2010.5.2.210>
- Mahoney, J. L., & Cairns, R. B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology*, 33(2), 241–253. <https://doi.org/10.1037/0012-1649.33.2.241>
- Maniar, A., & Modi, A. (2014). Educating whatsapp generation through" whatsapp". *ZENITH International Journal of Multidisciplinary Research*, 4(8), 23–38.
- Manzuoli, C. H., Pineda-Báez, C., & Vargas Sánchez, A. D. (2019). School Engagement for Avoiding Dropout in Middle School Education. *International Education Studies*, 12(5), 35. <https://doi.org/10.5539/ies.v12n5p35>
- Maphosa, V., Dube, B., & Jita, T. (2020). A UTAUT evaluation of whatsapp as a tool for lecture delivery during the COVID-19 lockdown at a Zimbabwean University. *International Journal of Higher Education*, 9(5), 84–93. <https://doi.org/10.5430/ijhe.v9n5p84>
- Mauder, R. E. (2018). Students' peer relationships and their contribution to university adjustment: the need to belong in the university community. *Journal of Further and Higher Education*, 42(6), 756–768. <https://doi.org/10.1080/0309877X.2017.1311996>
- McLaughlin, K., Moutray, M., & Muldoon, O. T. (2008). The role of personality and self-efficacy in the selection and retention of successful nursing students: a longitudinal study. *Journal of Advanced Nursing*, 61(2), 211–221. <https://doi.org/10.1111/j.1365-2648.2007.04492.x>
- McMillan, W. (2013). Transition to university: the role played by emotion. *European Journal of Dental Education*, 17(3), 169–176. <https://doi.org/10.1111/eje.12026>
- Mcphail, R., Fisher, R., & Mcconachie, J. (2009). *Becoming a Successful First Year Undergraduate: When Expectations and Reality Collide.*

- Miyajima, K. (2020). *Mobile Phone Ownership and Welfare: Evidence from South Africa's Household Survey, WP/20/222, October 2020.*
- Moodley, P., & Singh, R. J. (2015). Addressing Student Dropout Rates at South African Universities. *Alternation Special Edition, 17*, 91–115.
- Naaman, H. (2021). The Academic Dropout Wheel Analyzing the Antecedents of Higher Education Dropout in Education Studies. *The European Educational Researcher, 4*(2), 133–153. <https://doi.org/10.31757/euer.421>
- Naong, M. N., Mgcinazwe, G. Z., Lesang, G. M., & Fleischmann, E. (2009). *Challenges of Teaching First-Year Students at Institutions of Higher Learning* (Vol. 2, Issue 2).
- Olani, A. (2009). Predicting First Year University Students' Academic Success. *Electronic Journal of Research in Educational Psychology, 7*(3), 1053–1072.
- Pedler, M. L., Willis, R., & Nieuwoudt, J. E. (2022). A sense of belonging at university: student retention, motivation and enjoyment. *Journal of Further and Higher Education, 46*(3), 397–408. <https://doi.org/10.1080/0309877X.2021.1955844>
- Pendakur, V., & Harper, S. R. (2023). *Closing the Opportunity Gap*. Routledge. <https://doi.org/10.4324/9781003443414>
- Quadri, M. N., & Kalyankar, N. V. (2010). Drop Out Feature of Student Data for Academic Performance Using Decision Tree Techniques. In *Global Journal of Computer Science and Technology GJCST Computing Classification H* (Vol. 10, Issue 2).
- Robinson, D. A. G., Burns, C. F., & Gaw, K. F. (1996). Orientation programs: A foundation for student learning and success. *New Directions for Student Services, 1996*(75), 55–68. <https://doi.org/10.1002/ss.37119967507>
- Simamora, R. M. (2020). The Challenges of Online Learning during the COVID-19 Pandemic: An Essay Analysis of Performing Arts Education Students. *Studies in Learning and Teaching, 1*(2), 86–103. <https://doi.org/10.46627/silet.v1i2.38>
- Soria, K. M., & Stubblefield, R. (2015). Knowing Me, Knowing You. *Journal of College Student Retention: Research, Theory & Practice, 17*(3), 351–372. <https://doi.org/10.1177/1521025115575914>
- Stojanović, M., & Popović-Čitić, B. (2022). The sense of school belonging: Its importance for the positive development of students and prevention of behavioural problems. *Nastava i Vaspitanje, 71*(3), 403–423. <https://doi.org/10.5937/nasvas2203403S>
- Strydom, J., & Mentz, M. (2009). Should orientation for higher education teaching and learning be better? *South African Journal of Higher Education, 22*(5). <https://doi.org/10.4314/saijhe.v22i5.42930>
- Suhre, C. J. M., Jansen, E. P. W. A., & Harskamp, E. G. (2007). Impact of degree program satisfaction on the persistence of college students. *Higher Education, 54*(2), 207–226. <https://doi.org/10.1007/s10734-005-2376-5>
- Tadesse, S., & Muluye, W. (2020). The Impact of COVID-19 Pandemic on Education System in Developing Countries: A Review. *Open Journal of Social Sciences, 08*(10), 159–170. <https://doi.org/10.4236/jss.2020.810011>
- Tomei, L., Hagel, H., Rineer, A., Mastandrea, L. A., & Scolon, J. (2009). Do Orientation Materials Help Students Successfully Complete Online Courses? *International Journal of Information and Communication Technology Education, 5*(2), 73–89. <https://doi.org/10.4018/jicte.2009040107>
- Tomić, B., Stojanović, T., & Antović, I. (2022). EXAMINING STUDENTS' TEST ANXIETY AND PRE-UNIVERSITY PROGRAMMING EDUCATION IN AN UNDERGRADUATE INTRODUCTORY PROGRAMMING COURSE. 3848–3857. <https://doi.org/10.21125/edulearn.2022.0938>
- Tosevski, D. L., Milovancevic, M. P., & Gajic, S. D. (2010). Personality and psychopathology of university students. *Current Opinion in Psychiatry, 23*(1), 48–52. <https://doi.org/10.1097/YCO.0b013e328333d625>
- Udenze, S. (2017). *International Journal of Advanced Research and Publications Is Whatsapp Messaging Subsuming Conventional SMS?* www.ijarp.org
- UJAKPA, M. M., HEUKELMAN, D., LAZARUS, V. K., NEISS, P., & RUKANDA, G. D. (2018). Using WhatsApp to Support Communication in Teaching and Learning. In P. Cunningham & M. Cunningham (Eds.), *IST-Africa 2018 Conference Proceedings*.
- Wintre, M. G., & Yaffe, M. (2000). First-Year Students' Adjustment to University Life as a Function of Relationships with Parents. *Journal of Adolescent Research, 15*(1), 9–37. <https://doi.org/10.1177/0743558400151002>