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University as border crossing: Exploring the experiences of health sciences students from low-resourced school communities

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ABSTRACT

In responding to calls to widen access to students from less privileged communities, a South African university revised its admission policy for health sciences degrees to achieve a student population that demographically represents South African society. The new policy extends capacity for up to 40% enrolment from rural and other low-resourced schools. In this paper we report on aspects of a broader study whose data were collected through a semi-structured questionnaire. The paper shares university experiences of the first five cohorts of students from low-quintile and rural schools. We employed Phelan, Davidson and Cao's (1991) model of students' multiple worlds to understand participating students' experiences of transitioning into and through university. The findings provide insights into how the life circumstances of students from low-socio-economic environments affect their transition into and through university at academic and social levels. Viewing transition through the metaphor of 'border crossing', these findings challenge stakeholders in higher education (HE) to work towards either easing the crossing or dissolving the boundaries altogether.

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Introduction

Education provision in South Africa continues to reflect the deep inequalities established through colonialism primarily and later compounded by apartheid policies. Consequently, in response to historical disparities in education, demographic diversity in South Africa's HE institutions (HEIs) had to be conceptualised from the perspective of human rights, redress, and equity to extend access to all (Mapukata, 2022). In the period 2000-2016, the number of university graduates doubled from 92 874 to 203 076 (Statistics South Africa, 2019). However, the increased representation "in numbers" (Council on Higher Education (CHE), 2013:8) of (previously) underserved population groups has not translated into academic success. Attrition rates remain unacceptably high, and a concern in HE circles (CHE, 2013; Otu & Mkhize, 2018). Within health sciences education, challenges extend beyond admission of a demographically representative student population to include concerns about throughput rates that meet the demands of South Africa's population (Wadee & Cliff, 2016; Mabizela & George, 2020). This social justice imperative calls for the promotion of "equitable and fair access to students from all population groups, while ensuring optimal student throughput and success, and training future healthcare practitioners who will fulfil the needs of the local society" (Van der Merwe, Van Zyl, Gibson, Viljoen, Iputo, Mammen et.al., 2016:76).

Despite these calls for equitable access to HEIs, admissions criteria are not without contention; hence, medical schools globally have multifaceted admission policies. In South Africa, the use of applicants' high school grades alone would be highly problematic due to the persistent disparities in education provision and resultant schooling experiences. Wadee and Cliff (2016) suggested different admission policies that combine applicants' high school achievements and, for instance, pre-admissions tests and/or interviews. Although interviews and biographical questionnaires may present additional non-academic information about applicants that high school grades cannot provide, these tests have not been successful in judging predictive capacity for academic and clinical performance. Additional admission tests are therefore increasingly being used for selection.

As such, in 2003, several South African universities adopted the use of the Health Sciences Placement Tests (HSPTs) to gauge the potential of applicants to cope with the cognitive demands of HEIs (Wadee & Cliff, 2016). The HSPTs have since been substituted by the National Benchmarking Tests (NBTs) in addition to the National Senior Certificate (NSC). The NBTs have been considered good predictors of success for health science degrees - particularly the first year (see Allers, Hay & Ransburg, 2016; Mabizela & Green-Thompson, 2019; Mabizela & George, 2020). In this paper, we

will not attempt to delve into the debates of whether universities should use additional tests for selection, or for relevant support after admission. What we hope has been clear is that admission into health science degree programmes is highly contested, and that admission on merit alone may not help address the inequalities that have persisted in South Africa's education. It is therefore not surprising that the University of the Witwatersrand (Wits) concluded that their admission criteria did not result in a demographically diverse and representative student profile, as enrolment figures continued to reveal race and class inequalities.

In 2014, following extensive consultation with a range of stakeholders at Wits, and following a close analysis of previous admissions criteria and resultant student profiles, the university revised its admissions policy, initially for the medical programme, and later for all health sciences degree programmes. This decision was part of the university's efforts to achieve a student population that was demographically representative of South African society (University of the Witwatersrand, 2014). Additionally, this would provide a solution to the chronic shortage of health care workers in rural and other marginalised environments, where the lack of access to health care had been most acute (University of the Witwatersrand, 2014). The new criteria used a composite index calculated from applicants' NSC and NBT results to determine admission on a matrix of socio-economic indicators as follows:

- Top 40% to be admitted strictly by merit irrespective of socio-economic background
- 20% admitted by merit, but only for Black and Coloured students
- 20% admitted by merit but only for students from schools categorised as Quintile 1 and Quintile 2
- 20% admitted by merit but reserved for students from schools categorised as Rural.

By implication, the new criteria extended capacity up to 40% of qualifying first-year enrolment (as defined by the Faculty Advisory Committee on Admissions Policy), to be students from low socio-economic and rural backgrounds who completed their matric in low quintile schools[1] . The new admissions policy was viewed as more socially responsive and more likely to address transformation and equity issues. The new criteria were first applied to the 2015 cohort of first-year students. In recognition of the financial needs of the targeted students, the university promised a "comprehensive and generous offer according to need" and committed to a "triple offer" comprised of tuition, catered accommodation, and learning resources, as informed by experiences in the Wits

[1] The classification of schools into Quintiles 1-5, was born out of a need to move beyond the 'previously disadvantaged backgrounds' as a reference point, to provide more specific guidelines in assessing deprivation. As such, Quintile 1-3 schools are non-fee-paying schools that are afforded more resources through subsidies per learner (Ogbonnaya & Awuah, 2019).

Initiative for Rural Health Education (WIRHE) scholarship programme (Mapukata, Couper & Smith, 2017). The Minister of Health made a verbal undertaking to cover tuition and related costs of all students from these equity settings. In addition, students would be supported academically and through mentoring support (Faculty Board, 2014).

Given this background, this paper reports on the findings of a study that sought to understand the university experiences of students admitted into health sciences degree programmes from low-resource schooling backgrounds, following the policy review referred to above. The study was conducted in the fifth year of the University's project, at which point some students had already graduated from the three-year and four-year degree programmes.

Theoretical underpinnings

The challenges of transitioning from high school to university are well documented both in South Africa and elsewhere in the world. Although studies in student transition show that being at university often presents a challenge to students irrespective of socio-economic background, it is widely accepted that students from backgrounds that have traditionally been under-represented in higher education are more vulnerable (Reay, Crozier & Clayton, 2009; CHE, 2013; Nyamayaro & Saravanan, 2013; Kift, 2015; Nyar, 2021). For them, university is an "'out-of-habitus' experience" (Reay et al., 2009), where students face unique challenges as they make individual transitions, academically, socially, culturally, administratively, and environmentally (Kift, 2015; Mapukata et al., 2017). For these non-traditional students, academic outcomes and retention often depend on the extent to which they can adapt and assimilate into the university culture, a culture which, in Historically White Universities (HWUs), is known to alienate and exclude Black students' identities (Bazana & Mogotsi, 2017; Maseti, 2018; Shabalala, 2019; Mapukata, 2022). Successful transitions for these students, then, require drawing on their cultural wealth and capacities for resourcefulness and resilience (Yosso, 2005; Reed, Maodzwa–Taruvinga, Ndofirepi & Moosa, 2019; Mapaling, 2023), and having hope (Gallagher, Marques & Lopez, 2017; Mason, 2021). Transition is therefore more complex for non-traditional students. Given the effort required to acclimatise to an HWU as aforementioned, a layer that requires further understanding at Wits University is how the students themselves experience and perceive their transition into and through this HWU space, and to which calls for decolonisation have been made.

Acknowledging students' multiple social worlds is critical in centering the perspectives of students in transition, especially considering the existence of perspectives which focus on "modifying" students from low socio-economic backgrounds to 'fit' the university (see Wahl & Falik, 2023). Although Western in origin, the work by Phelan et al. (1991) is seminal in this area, in foregrounding the interrelationships of students' family and school worlds and how they combine to affect student engagement in learning. Their study explored desegregated high school students' perceptions of boundaries between worlds and the adaptation strategies that the students employed as they moved from one context to another. Phelan et al. (1991) define the 'world' in terms of cultural knowledge and behaviour found within the boundaries of students' families, peer groups, and schools, where the world is presumed to have values and beliefs, expectations, actions, and emotional responses familiar to insiders. The authors argue that the ways students perceive boundaries between their different social worlds are important in shaping their transitions. Boundaries and borders may be real or perceived barriers between worlds. Although this framework is based on a study of high school students, it is common for established authors who undertake research with students from marginalised communities to have their work explored across population groups (see Reay, 2001 and Reay et al., 2009). We opted for this framework since the focus of our study was on evaluating successful transitions across contexts; we were keen to examine the norms, values, expectations, and experiences of students transitioning from low-resourced school communities. In that regard, transition into and through this South African metropolitan university was the focus of the study.

Phelan et al. (1991) developed a typology to illustrate patterns of transitions based on students' multiple worlds and the relationships between them.

I. Congruent worlds: smooth transitions
II. Different worlds: boundary crossing managed
III. Different worlds: boundary crossings hazardous
IV. Borders impenetrable: boundary crossing insurmountable

We explain the transitions patterns below.

Congruent worlds: smooth transitions

Congruent worlds are where commonalities between worlds override differences. In such cases, students find the values, beliefs, and expectations of the home setting to be quite aligned with those of school. They barely perceive any boundaries between their worlds, and hence movement is not

complicated. Within a metropolitan university setting, students who come from well-resourced schools, those from suburban settings, and whose parents or other family members have been to university may experience some congruence. In such cases, transition is smooth as "worlds are merged by their common sociocultural components" (Phelan et al., 1991:229), resulting in easier adjustment to the new learning environment.

Different worlds: transitions managed

In situations where students' worlds are different, for example in terms of ethnic composition, socio-economic status language or religion, there is need for adjustment. However, even with these differences, if students perceive the boundaries between their worlds not to be too difficult to prevent crossing, then transition will be managed. This does not mean that the transitions will be easy. From Phelan and colleagues' 1991 study, students had to manage challenges related to, for example, discrimination because of their ethnicity and socio-economic status. They managed the adaptation, at times supported by peers and/or family, or through sheer resilience.

Different worlds: boundary crossings hazardous

Just as is the case in the category above, students' worlds are different, and in cases are even in opposition, for example, religious values, cultural identity, or methods of teaching. Boundary crossing "involves friction and unease" (Phelan et al., 1991: 237). Student adjustment may therefore be successful in some areas but not in others. Unfortunately, where adjustment challenges lead to academic difficulties, this may be misinterpreted to be a result of laziness, lack of motivation, or ill-discipline. In the context of a South African metropolitan university, religious values, language of teaching and learning, and methods of teaching and assessment can potentially lead to hazardous transitions.

Borders impenetrable: boundary crossing insurmountable

The values, beliefs, and expectations of students' worlds can present as completely discordant, and when border crossing is attempted, it is so distressful that students may "actively or passively, resist attempts to embrace other worlds" (Phelan et al., 1991: 240). Adjustment is made impossible by a perception of the boundaries as impenetrable. Phelan et al. cite causes such as opposing value systems, a sense of isolation, and negative perception of ethnic identity. None of these causes are

incompatible with the South African context, particularly within metropolitan universities, and they hinder students' ability to adjust effectively, thus affecting their learning.

Phelan et al. (1991) emphasise that the patterns illustrated in this border-crossing model are not necessarily rigid. They can be influenced by external factors such as classroom or school climate, change in home circumstances, or levels of support. Previous applications of the theory of border crossing include Aikenhead's (1996) proposal to view students' grappling with science learning in terms of crossing cultural borders from the subcultures of their peers and family into the subcultures of science. Rather than aiming to assimilate students into the subculture of science, Aikenhead proposed facilitated cultural 'border crossing' through deepening understanding of students' cultures and critical analysis of the norms, values, beliefs, expectations, and conventions of the subculture of science. More recently, Yang and MacCallum (2022) applied the theory to the transition of international doctoral students and identified congruences and differences across the students' personal, research, and social worlds. The authors identified a key factor in the candidate's success as their ability to negotiate the transitions across their worlds. The theory could apply to South African university settings, where transition is already a major discussion point in student success and student advising circles. Notwithstanding Phelan et al.'s observation about the situation in schools, that "many adolescents are left to navigate transitions without direct assistance from persons in any of their contexts, most notably the school" (1991: 224), Wits University does provide support. What may require further interrogation would be the extent to which students in transition view the interventions as empowering in negotiating boundaries between their different worlds, or better still, if the interventions seek to dissolve the boundaries altogether.

Methodology

The study employed concurrent mixed methods design, generating both numeric and narrative data (Teddlie & Tashakkori, 2009). Participants for the study were drawn from Wits University's five cohorts of health sciences students admitted from low quintile (Quintiles 1 and 2, and Rural) schools through the revised admissions criteria from 2015 to 2019. The study had approval from the Wits University's Human Research Ethics Committee (Medical, M180943). An online semi-structured questionnaire (on Google Forms) was used to generate baseline data, as well as data on how students had experienced university from the time of their enrolment. An invitation for participation was extended to all students in the five cohorts. There were no space limitations for the open-ended questions, allowing participants to write as much as they felt comfortable sharing.

With a view to generating data that would help us understand the chosen cohort's experience of university, we structured the questionnaire in a way that would generate data on the following:

- *Students' university status:* degree programme and year of study.
- *Home background:* province of origin and home language(s).
- *Family support and family education:* to understand if participants felt supported by family members, and if so, in what way. We also wanted to know the students' status regarding family members who had been to university as well as related benefits and/or challenges associated with that status.
- *University funding status:* to establish participants' financial situation. Participants were asked to describe their current situation regarding tuition fees, accommodation, meals and textbooks, and related benefits and challenges. In addition, the participants were directly asked about their university experience, and how they had managed so far.

The questionnaire was open for three months, from September to November 2019, prior to the COVID-19 pandemic. A reminder was sent out one month after the questionnaire had been sent.

Responses were exported from Google Forms to an Excel spreadsheet. We anonymised the data by allocating each participant a number from S01 to S43. To each number we added a third digit preceded by a dash which represented the participant's year of study, for example, S02-3 was in third year while S03-1 was in first year. As the response rate was too low for statistical analysis, the numerical data were analysed using descriptive statistics.

Having engaged with the typology that illustrate patterns of transitions across multiple worlds (Phelan et al., 1991), we used deductive thematic analysis to determine the extent of the application of the patterns in participants' narratives (see Guest, MacQueen & Namey, 2012; Mateo-Babiano, Recio, Ashmore, Guillen & Gaspay, 2020). The analytic categories were thus predetermined, and data were applied to these categories.

Results

The response rate was 9.25% (n=43), based on the overall number of students in the low quintile cohorts admitted since 2015. Participants' ages ranged from 18-24 years.

Participants' university status

The participants were enrolled in eight of the nine health science degree programmes offered at Wits at the time. Most participants were registered for Bachelor of Medicine and Bachelor of

Surgery (MBBCh, 44,2%), and Bachelor of Pharmacy (BPharm 22,3%), respectively. Figure 1A shows the distribution of participants by degree programme. None of the participants were enrolled for Bachelor of Dental Science.

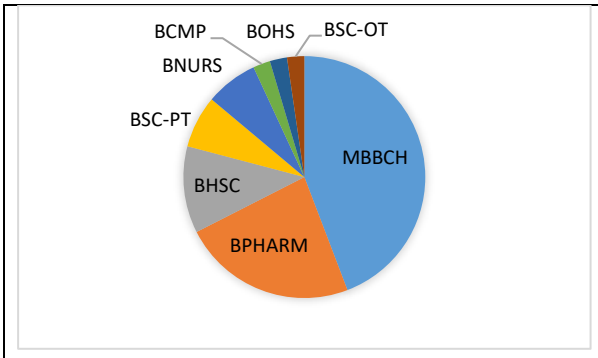

Figure 1A: Distribution of participants by degree programme

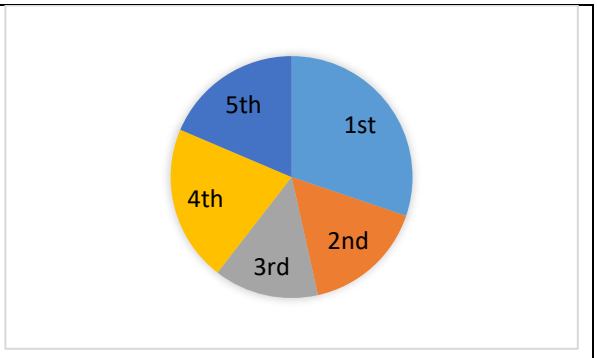

Figure 1B: Distribution of participants by year of study

The participants were at different levels in their studies, ranging from first to fifth year (Figure 1B). Most were in first year (30,2%), followed by fourth (20,9%), fifth (18.6%), second (16.3%), and third year (14%).

Home background

The participants hailed from six of the country's nine provinces (Figure 2A). Limpopo Province had the largest representation (42,3%), followed by KwaZulu-Natal (27,9%). They collectively listed 14 languages spoken at home (Figure 2B), with 67,4% reportedly speaking one language at home, and in each case, this was an African language. Up to 16,3% spoke three different languages in their homes. Only 18,6% of the participants included English as a home language.

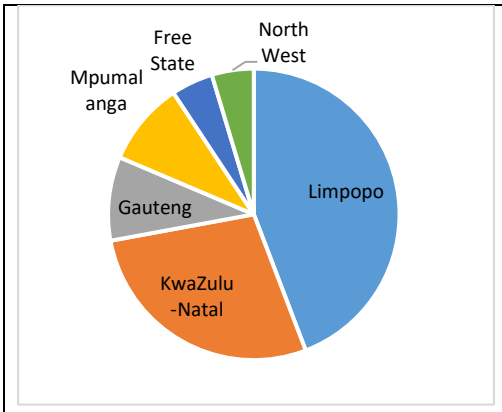

Figure 2A: Province of origin

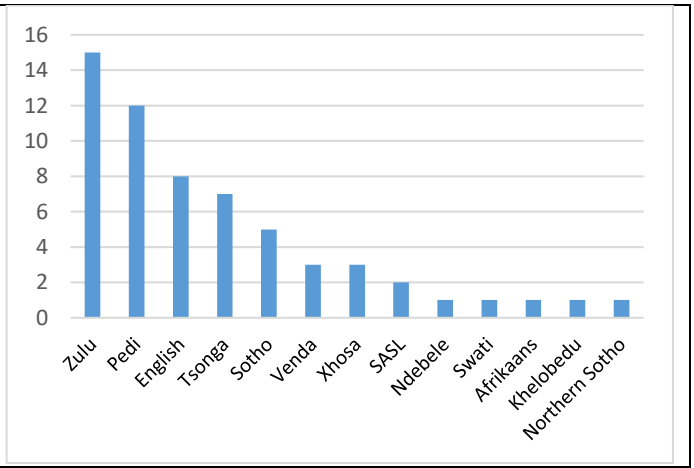

Figure 2B: Languages that participants speak at home

Family support and education

In response to the question about which family members were a source of support in relation to their education, the participants cited one or more, inclusive of parents, grandparents, siblings, and even family friends. While 25,6% reported being supported by only one family member, the rest reported receiving collective support from the immediate and extended family. 97,6% of the participants reported receiving financial support while 48,8% mentioned emotional support such as encouragement, motivation, spiritual and mental support. For example, "Whenever I feel overwhelmed by the amount of work they [family] are always there to calm me down and remind me of why I'm doing this" (S30-2). In some cases, the participants chose not to disaggregate the form of support, simply describing it as "everything" or as support "in all respects."

Only 8,1% of the participants reported having parents who had a university qualification, while for a third, it was siblings or extended family members who had. The majority of participants were therefore first-generation students. Participants appreciated instances where family members could relate to the academic, financial, and emotional needs of being a university student:

> My uncle and aunt understand my needs as a student (S03-1).

> You have someone who can advise you on how to get into varsity; ways of tackling the workload; and also, when they work, some tend to support you financially (S08-5).

One participant highlighted the reassurance from family members when they were in distress, "…knowing that everything is going to be okay regardless of failure of tests (advice from sister)" (S06-1).

Participants who were first in their families to be in university did not feel as privileged with regard to family support in the context of their university experience. Commonly-cited challenges were financial (59.4%) and emotional distress (53%). Students struggled to adapt to an academic environment that they construed as unsupportive (69.7%), and they felt that their families were not equipped to provide them with the required support.

> They [family] cannot understand my frustrations and stressors. That's the hardest part. Whenever I tell her [mother] about how hard and challenging it is here she always tell me to pray and that she believes in me. I guess that's all she can do. Not saying these responses do not help, they just don't encompass everything (S23-1).

> The challenge of being from a family with no university background is that they don't understand university challenges. You discover everything by yourself. It's like walking on a journey no one has ever walked through, you explore and discover everything by yourself, with no advice of how to navigate (S27-5).

Although achieving university entrance made families proud, those participants who were first in family reported added pressure of unrealistic expectations from family members: "The benefit is that my parents are very proud. The con, though, is their unbelievably high academic expectations that I perform as well as I did in high school. In their defence I had the same expectation till I got here" (S25-4). One participant expressed feeling like they were being pushed to be the best, while another was even expected to provide leadership in family matters:

> As being a male figure at home - everything that happens they inform me. This makes them rely on me to provide solutions at home specially on the conflicts. This has caused me to slack at school because no one is supporting me and when I tell them things are not going well at school they don't understand, and the fact that I am the head of the family, I am expected to find a way to manage all of this (S15-5).

The participants clearly understood their families' limited capacity to assist them navigate some of the challenges they encountered on campus. The unfortunate result was that the students would not share their challenges with family.

> Sometimes my parents don't really understand the amount of pressure I'm presented with, being at university. As a result I feel like there are things I can't really discuss with them (S30-2).

> No one [in the family] truly relates to the struggles I have endured since first year, so it becomes difficult to communicate them (S38-3).

Unfortunately, even some parents who had post-secondary qualifications did not fully appreciate how their children experienced campus, especially medical school. In the absence of appropriate family support, university experience was an ordeal that the students just "survived":

> No one has a university qualification in my family thus I do not get any support with regards to academics and it is difficult for them to understand how the university operates and therefore struggle to provide the support structure I need to survive university (S41-2).

First-in-family participants also reported challenges with financial costs outside of tuition, accommodation, and living expenses, which families may not be aware of. Some students with bursaries receive funds late, as in the case of S36-4:

> Everything is first with me, they[family] were never prepared for the costs and it's always financially straining when I have things like class contributions, registrations before the bursary gets their budget, uniform (scrubs), assessment tools (stethoscope, goniometers), etc. (S36-4).

We can conclude from the data that although all participants came from low socio-economic backgrounds, those who were first in their families to be in university (not just first-generation students) struggled more with adjustment than those who were not. Sadly, even where students have assurance of bursary funding, payments come too late to cushion students from stress.

Funding, accommodation, and meals

Participants reported receiving funding from various sponsors such as the National Students Financial Aid Scheme (NSFAS) (58,1%), Department of Health (16,3%), Quintiles 1 & 2 bursary (9,3%), and private funding (20.9%). 11,6% were self-funded, meaning that their family had to meet all costs. Some participants mentioned combinations of funding sources, which suggested the inadequacy of any one source to cover all costs.

With regard to accommodation, most participants reported being in a university residence (62.8%). 32.6% resided in private student residences, while 4,7% described their accommodation simply as a "rented room". Participants viewed living in a university residence as beneficial, because of academic support, safety, sense of community, and equal access to university resources. The only challenge cited was the pressure from house committees for all students to pass – which S12-1 described as "tough love". Participants' views of the benefits and challenges of private residences depended on their distance from campus, discipline regulations, and whether they offered reliable internet connection. Participants viewed staying off campus as disadvantageous in terms of safety, lack of access to secure transport, academic resources and support, as well as to structured social support. Being in busier degree programmes, some participants viewed the unregulated social activities at private residences as an obstacle: "A lot of noise. Sometimes (parties). The fact that it's a mixed gendered residence makes me feel unsafe because of the gender-based violence that is happening in South Africa" (S20-3). We can infer from the data that prioritising university accommodation for students from low socio-economic backgrounds is an enabler to easier academic and social transition.

With regard to food security, 41.9% of the participants reported having three meals a day, and the rest (58.1%) had two or less. 23,3% described their meals as being inadequate. Having funding did not guarantee food security. The experience of one fourth-year participant gave a helpful longitudinal perspective:

> Very adequate compared to my meals before I moved to res, because then every day was an endless adventure of whether or not I will eat. If I did it would hardly be a meal, mostly noodles or cereal because they are the most affordable "bulk" I could get. So in second and third year I had three meals as I had a scholarship which covered all my expenses…This year I'm taking two meals because the scholarship experienced some difficulty and had to let some of us go. And so I figured if I could decrease the cost for my parents then makes sense to decrease the meals because I know the situation at home (S25-4).

Participants reported taking fewer meals to save for other necessities:

> I chose one meal a day and make a plan for the others because I want to use the change I get to buy other things for myself like clothes, textbooks, transport to go home. My parents have to pay for my siblings also. I also bought myself a smartphone this year which helps me with my schoolwork (S20-3).

Almost a quarter (23,3%) of our participants reported themselves to be food insecure, some because of financial choices they had to make based on their family's financial circumstances. This food (in)security potentially negatively affects the quality of participants' university experience and their academic outcomes.

Experience of university

The data above points to a direct relationship between family education and socio-economic circumstances and students' experience of university. In addition, we explore participants' direct descriptions of how they experienced adjusting to university. Participants used adjectives such as "tough", "challenging", "stressful", "horrible", "difficult", and "very hard" to describe their transition (Table 1). The participants' experience of university seemed to be related to a few factors.

Firstly, participants' university experience was directly influenced by their perceptions of their home and school backgrounds in relation to the university environment. University seemed to demand more, academically, than what they had been prepared for by home and school. Students reported academic challenges related to their proficiency in English (the university's language of teaching), lack of experience using computers and laboratory equipment, unfamiliar methods of teaching and assessing, length of school day, and general lack of information on what to expect at university. For example, "Adjusting was very challenging. The workload was too heavy. Had to train my brain to be productive from 8am to 5pm and further going through the work covered during the night. I had to learn answering MCQs" (S05-1).

One third-year student recounted their experience from first year:

> It has been a very difficult road, starting from first year when I had to use a computer which I had never before in my life, having to type 3000 words for assignments and having to read articles for my assignments. I could not communicate with my lecturers because I did not know how to compose email, and I could not approach my lecturers because I could not speak English (S34-3).

Table 1: Participants' descriptions of their experience of university through the lens of multiple worlds

Smooth transitions	**Transitions managed**	**Boundary crossing hazardous**	**Boundary crossing insurmountable**
• The bursary I have provides seniors to help first years with the above mentioned [i.e., experience of adjusting to university] and also I was quick to make friends and learn my environment (S36-4).	• It was tough at first, but I survived (S03-1). • Adjusting was very challenging (S05-1). • Very hard. I am passing so well but I'm unable to manage my social life (S19-1). • It was hard to adjust in first year, but... I found a way to cope with my schoolwork and life in general (S24-4). • First year was hard (S26-4). • Adjusting to university is a process (S37-1) • Sometimes I struggle understanding the English used in the questions and hence the reason I do not do as well as I would like (S39-5). • First year was a bit tough (S41-2). • It took a lot of work, confidence and embarrassment for me to finally adjust (S42-4). • Not everything about it [transition] is bad though. It…teaches few of the most vital things in life: independence, creating a network of people who have the same goal as you (S23-1). • Very tough at the beginning (S43-1).	• It was the worst transition… (S02-3). • It was difficult...because of English...I was told it was too late for me to be learning English (S08-5). • Adjusting is not easy.... Being away from home is also generally disadvantageous (S10-2) • Just had to toughen up emotionally (S12-1). • I can't say my experience is a sturdy one- …sometimes I wake up and ask myself if I really need school (S13-2). • It has been difficult to adjust to this life**..** (S15-5). • Quite difficult, …I always feel overwhelmed during the test week (S20-3). • One major rollercoaster … The emotions, the academics, the stresses, the uncertainty all tempt you to quit while you still can and engulf you with a certain level of hopelessness (S25-4). • Stressful (S28-3). • It's been really tough (S30-2) • Very hard (S32-5). • Wasn't easy (S33-1). • A very difficult road (S34-3). • It was challenging. It was hard learning how to tackle academic writing (S35-5). • Difficult …The experience has been testing to my mental health (S38-3).	• Bad. Every time you adjust, the system always changes and you feel like it's working against you in every way and the difficult transition from year to year… (S06-5). • I'm not yet sure if I have adjusted (S27-5).

S42-4 reported avoiding conversations to avoid embarrassment: "I would get stuck and forget the words, this made people laugh at me" (S42-4). The disadvantage related to schooling circumstances required our participants to work much harder to keep up with their classmates: "The background of being from disadvantaged schools stays with you throughout. Understanding things being taught is not always easy. It always feels like for you to reach the level of your classmates you must do thrice as much" (S27-5). The challenges from the participants' schooling background persisted beyond first

year, and they were not always appreciated by those teaching them. S27-5 explained, "This is even worsened in clinical years. Doctors are not supportive. Often one is ridiculed when they don't know stuff, and one gets a feeling of despair, and studying and learning suffers even more."

Secondly, in cases where students did not have accommodation in a university residence, they reported additional challenges such as lack of safety and difficulties making friends that are counter to academic engagement and promoting a sense of belonging. S25-4 recounted a mugging incident that she experienced while walking from school to her accommodation, which was 45 minutes' walk from university, and in an area that was not reached by the university bus service. Another participant (S42-4) commuted from home, and seemed to have lost out on basic information, mentoring, and critical friendships:

> In first year I did not know that there is something called Wi-Fi, and because I was staying at home I missed out on most of the class activities because I did not have data and I had no one to tell me these things because I was not close to anyone. I was always late for class, and if the class was moved to another venue last minute, I did not attend because I knew nothing about it (S42-4).

They experienced loneliness, and many mentioned mental health challenges,

> The hardest year was first year. Moving away from home and being in the city and not having anyone to be with at times. Although you have friends from back home you feel they are also busy adjusting and making new friends which does make you feel left out at times. You get stuck trying to find yourself and fit in. Also, you get homesick a lot (S11-4).

The way that the participants described their experience of university points to lack of congruency between their home and university worlds. Consequently, some participants only just managed the transition into university while the majority perceived it as hazardous. Two participants even experienced university transition as insurmountable. We find this very significant because both were in fifth year, but they still felt like outsiders to "the system." Therefore, the participants' descriptions that we interpreted as smooth transition (see Table 1) are not a result of perceptions of congruency of home and university, but more a case of participants choosing to focus on the 'bright side', as well as highlighting specific benefits of one bursary.

Factors that helped with adjustment

After having some insight into the participants' experience of university, it was necessary to explore their perceptions for what helped them adjust. Participants reported getting support from: (1) the university (on-campus accommodation, internet connectivity, tutor and other academic support, first year experience programmes, counselling, and surprisingly, academic failure); (2) family and

other social networks (family, friends, class mates, students from backgrounds similar to theirs, senior students, mentors, [named] staff members); (3) religious connection (going to and participating in church activities, praying); and (4) personal attributes (hard work, resilience, self-care, belief in self, learning from mistakes/failure, being flexible). Surprisingly, only two participants cited funding support, and with that they emphasised the social connections that the bursary facilitated.

Although the process of adjustment to university may have been hard for the participants, it brought about personal growth. For S05-1 adjustment was necessitated by failure: "Failure made me settle in. I failed a lot of tests and that woke me up". S08-5 reflected and advised: "I allowed myself to be dynamic. You need to be like water (when you put it in the cup, it becomes the cup). In simple terms, improvise, adapt, and overcome". Participants reported on the benefit of being intentional about choice of friends, with choices more inclined towards those from relatable backgrounds.

Another surprise finding is how a sense of social (family) responsibility contributed to participants seeing the need to adjust: "Know[ing] that even though this is degree is going to be in my name and I'm the one acquiring the knowledge, it will also help me help the other people in my life financially and emotionally" (S20-3). The understanding of the breadth of benefits of completing the degree as not just for the self, but for the family as well, motivated some participants.

Overall, the data suggests challenges transitioning into university for students from low socio-economic backgrounds, and more for those who were first in family. Participants who were in higher years of study gave a longitudinal view of their experience, which points to challenges transitioning through university persisting for students from low socio-economic backgrounds beyond first year.

Discussion

Wits University's new admissions policy had targeted up to 40 % enrolment for students from South Africa's disadvantaged schools. However, during the study period, the lived reality was an intake that was below target at 10,3% (2015), with the highest intake at 15.8% (2019), confirming the persistent underrepresentation of students from rural and low quintile schools even with targeted enrolment (Nyamayaro & Saravanan, 2013; Kift, 2015; Nyar, 2021). The university's 40% target can be viewed as generous in terms of enabling access if one takes into consideration that this initiative was

introduced in the context of entrenched inequality within South Africa's schooling system (Bazana & Mogotsi, 2017).

There was consistency in the findings of students' university experiences across degree programmes. The journeys of discomfort that our participants shared may be reflective of the overall experience of students from low socio-economic backgrounds, congruent with findings reported by Diab, McNeill and Ross (2014) and Mapukata et al. (2017). It is not surprising that most participants did not speak English at home. The resilience of South African indigenous languages is seen in their surviving more than three centuries of colonisation. Studies also show that in rural schools, teaching is often done in local languages, and even where students are taught in English, the language is hardly spoken outside the classroom (Khupe, 2017). The reality of students coming to university with limited proficiency of the language that is used for teaching and learning (Mapukata et al., 2017) points to the need for language-based academic support.

That 91,9% of the participants were first-generation students highlights the pervasive challenges encountered by students from low socio-economic backgrounds. Universities consider such students at risk of academic failure and as having a low probability of completing their studies (if at all) in minimum time. However, 14% of participants were in the final year for four-year degree programmes, and 18,6% were in fifth year (thus likely to complete their studies in minimum time), compelling one to conclude that their success was driven by their circumstances, intrinsic motivation, and self-efficacy. Participants who had family members with university qualifications reported greater advantage in terms of quality of support compared to those whose family members had college education or less. The pivotal role of family in providing support and motivation for students resonates with Moosa and Aloka's (2023) findings. Although family members may not have been to university themselves, they still played an important role in providing emotional support. According to Parkinson and Crouch (2011), parents with a university qualification are considered a positive influence, and moderate students' feelings of being "educationally disadvantaged" (p. 9). Conversely, as shown in this study, first-generation students are often motivated by their personal circumstances to succeed: "your background stays with you…", and their grit and determination: "you must be dynamic" constructed through perseverance of effort and a willingness to rise above their circumstances (Alhadabi & Karpinski, 2020; Mapukata, 2022). Considering the challenges faced by these participants, this study highlights the value of social and non-cognitive variables in facilitating academic achievement (Alhadabi & Karpinski, 2020), as many of the participants could source these from mentors, friends, and family. Similarly, hope sustained many of the participants as they navigated the university world year-on-year. Gallagher et al. (2017) highlight the importance of

hope in sustaining wellbeing and engagement, a point that is supported by Mason (2020), who explored the role of hope among first-year students at another South African university.
The home and schooling backgrounds of students from low-resourced schools present an unquestionable need for support with adjusting to a metropolitan university environment. One cannot overlook the custodian role of the Department of Basic Education and thus the South African government in ensuring equity in education provision. While a good understanding of the students' situation (as shown in this study) is helpful for designing interventions, O'Shea (2016) and Reed et al. (2019) caution against dwelling on deficits. They suggest (respectively) drawing on the students' cultural wealth and teaching those skills that increase students' resourcefulness and resilience. Our data has demonstrated a range of approaches adopted by the participants themselves to facilitate their adjustment to an unfamiliar, and seemingly hostile, environment.

The experiences of students in this study confirm that Wits University is indeed a different world from the one where students from low socio-economic backgrounds are raised and schooled (Phelan et al., 1991; Bazana & Mogotsi, 2017). Phelan and colleagues' (1991) model of multiple worlds is a helpful lens through which the university experiences of these students can be understood. In our context, the model's descriptors of transitions as smooth, managed, hazardous, and insurmountable require nuanced application. Participants whose transition we interpreted here as smooth are those who were fully funded and whose bursaries facilitated the development of appropriate social connections. In their own descriptions, students chose to highlight the benefits gained from their experience transitioning into and through Wits University, rather than the challenges. We interpreted as 'managed' those descriptions that suggested the challenges were now in the past, and as 'hazardous' descriptions where challenges were expressed as a high level of difficulty or expressed as present and continuing. Unlike in Phelan et al.'s study, where insurmountable boundary crossing may signify dropping out, in our study it signified students expressing difficulty to 'fit' into the University as a system. We find this very significant, considering these expressions came from students who have been at the university for five years, and have made good academic progress. That there are students close to degree completion but still feeling marginalised is staggering. Since the admission of health sciences students from low socio-economic backgrounds is itself a 'transformation' initiative, interventions that foster a sense of belonging should reach classroom and clinical spaces to create bridges that facilitate smoother transitions for students.

This study has also shown how the university experiences of health sciences students from low-resource communities can border on trauma. Expressions that describe the adaptation process as

just "surviving", requiring "toughening up emotionally" or "just sucking it up" are loaded with implications for students' mental health and well-being. Sadly, these findings of hazardous and insurmountable crossings are not peculiar to Wits University. They are commonly reported by students from low socio-economic settings (see Ross, 2015; Dumas, 2016; Bazana & Mogotsi, 2017). Reay et al. (2009:1115) report of students feeling "like strangers in paradise". As shown by Bayaga, Lekena, Selepe, du Plessis, Blignaut and Morar (2022), these findings are informative in the light of the university's transformational goal of widening access to students from marginalised communities. This study has demonstrated that the students' experiences at university play a role in developing their sense of (un)belonging, their engagement in learning, and their persistence and success (Alhadabi & Karpinski, 2020). Such experiences could impact student satisfaction, on which university ranking data is partially based.

The revised admissions policy at Wits University was a major step in negating the elitist view of admission into health sciences degree programmes. The findings from this study highlight what could be described as a 'Grand Challenge' within the South African higher education context (see Behari-Leak, 2024). The students' experiences of university expressed in the descriptions of their transitions point to epistemic injustices that persist within teaching and clinical spaces even when transformation is being pursued. Far from cushioning students from low-resource communities, earning a university place can become a mental health burden on the students if the host environment is perceived as not enabling students to thrive. We concur with Behari-Leak (2024) that such realities, though uncomfortable, should not be sidelined, as HEIs in South Africa pursue global Grand Challenges.

The context in which the participants of this study experienced university is unique and therefore may not be amenable to generalisation. However, those students' experiences are noteworthy and require the institution to develop programmatic responses (see for example, Wahl & Falik, 2023) but taking care to not implement them from a deficit perspective.

Limitations

A significant limitation of this study was the low response rate, which was primarily influenced by the timing of the data collection coinciding with the end-of-year examinations period which begins in October. This was not necessarily avoidable, considering the high frequency of assessments for health sciences students at different points depending on the year of study. The other set of

challenges was only clearly understood from the findings of this study: that participants had variable access to resources such as computers and Wi-Fi. The researchers now better understand the time constraints from the participants' competing interests and demands, such as commuting to campus, making meals, and keeping up with academic work. When considered from Sandewolski's perspective (1996), sample size sufficiency in a study that has a qualitative component should be large enough to facilitate an understanding of the phenomenon under study but small enough to support contextual analysis of the experiences of individuals within a defined group. We consider the amount of qualitative data that was generated to have been sufficient to provide understanding of the university transition of students from low-resourced schools. Additionally, as much of the data was collected through a self-administered questionnaire, due to the impact of COVID-19, we missed an opportunity to further explore some of issues raised by participants through focus group discussion, as had been previously planned. Although doing this research with students from low-resource settings was a rewarding experience, the researchers were conscientised to the burden that university transition imposed on participants who constantly had to adjust to unfamiliar environments (see also Mapukata et al., 2017).

Conclusion and recommendations

Through its revised admissions policy, Wits University's Faculty of Health Sciences contributed to widening access to students from low socio-economic backgrounds. Notwithstanding an unfamiliar cultural world represented by the institution, funding, university accommodation, and having parents, siblings, or extended family members who have a university degree assisted participants somewhat in managing their transition. Within Wits, having friends and mentors from similar backgrounds contributed to successful navigation of what was considered an isolating environment. This finding places peer-led interventions as paramount in bridging the transition gap for students from low-resourced schools. Although students will benefit from learning from the diversity that they experience at a metropolitan university, pairing them with students from similar backgrounds could provide a 'safe' space from which to navigate the university.

Considering the future role of health sciences students in contributing to access to health care, the challenges faced by participants in this study should be viewed as a national priority in addressing the social justice imperatives at the level of student transition and extending to national health outcomes. The achievement and success of the study participants, who were mostly first generation,

could be significant as they become role models and motivators for learners drawn from schools and communities in low-resource settings.

Based on our experience as practitioners of student academic development, we recommend targeted interventions that create a sense of belonging and community among non-traditional students. Secondly, we recommend the adoption of transition pedagogies suggested by Kift (2015) to be embedded in the curricula rather than as add-ons.

In closing, we suggest a shift from transition interventions that focus solely on student inadequacies to those that recognise student strengths as well as identifying and interrogating institutional practices that create impassable boundaries for non-traditional students.

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