Subjective Norms as Determinants of University Students' Response to Covid-19 Vaccination Call During the Pandemic Era: Results from a Qualitative Inquiry

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Abstract

Students' health-seeking behaviour cannot be fully detached from the influence of subjective social norms since they prescribe behaviours approved by their social affiliations. This study aimed to explore the influence of parents' and peers' subjective norms on students' responses to COVID-19 vaccination in Tanzania. The findings from thirty-three interviewees who were reached by means of purposive and convenience sampling techniques revealed that parents' actual subjective norms and peers' injunctive norms influenced the students' response to vaccination. The evidence suggests a strong influence of norms on students' health-seeking behaviour, mainly when injunctive norms are reflected in the descriptive norms. Thus, health promotion interventions should not underestimate the power of norms.

Keywords: peer influence, parents' norms, COVID-19 vaccination, university students

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Introduction

University students worldwide experienced the impact of COVID-19 following the closure of universities aimed at containing the spread of the coronavirus on campuses. Reports of COVID-19-related fatalities emerged among both students and employees across various universities in Africa and other countries, documenting cases of both student and faculty deaths attributed to COVID-19 (Klein et al., 2022; van Schalkwyk, 2020). The resulting tensions were linked to the challenges of remote learning, the hospitalisation of fellow students, and concerns for their own safety and the well-being of loved ones. Consequently, an increase in incidences of depression and suicidal feelings was observed among many students residing in areas highly prone to COVID-19 (DeVylder, Zhou, & Oh, 2021; Fruehwirth, Biswas, & Perreira, 2021).

In Africa, though the threat was not as immense as it was in Europe and the United States, a big challenge was that of transforming from the traditional face-to-face mode

teaching to online teaching. Attending online classes via Zoom, Google Meet, and other platforms was a big challenge in the continent, where only 24 per cent of the population have access to the internet (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020). Even this 24 per cent is still faced with another challenge of unreliable electricity, high costs of internet bundles, and inadequate training of instructors in the use of distance learning platforms (Kabage & Sanga, 2022). The battle against COVID-19, as outlined by health ministries, encompassed a range of measures. These included pharmaceutical interventions such as vaccination and non-pharmaceutical measures, including handwashing, social distancing, and wearing of face masks (Kabakama et al., 2022; Rudert & Janke, 2022). This study specifically explored the determinants of university students' response to COVID-19 vaccination campaigns, with a particular focus on the subjective norms established by their families and peers.

Tanzania was one of the countries in the world that openly hesitated to accept COVID-19 vaccines in the very early days of their advent due to concerns that the vaccines were not safe for human use (Kabakama et al., 2022; Makoni, 2021). Vaccine hesitancy was evident in statements made by political figures, setting the stage for widely shared norms, attitudes, and risk perceptions regarding vaccine usage. The acceptance of vaccines gained momentum in the latter half of the year 2021, following the passing of former President John Pombe Magufuli, as endorsed by his successor (Yamanis et al., 2023). The acceptance of an approach that had previously been heavily cautioned against necessitated a process of cognitive reconstruction to bring about a shift in attitudes and norms deeply entrenched in the minds of many citizens. An illustrative study pointed out that, even among healthcare professionals expected to educate the general public about the benefits of vaccination, the acceptance of the vaccines amongst them was limited, despite their heightened risk of contracting the virus from infected patients under their care (Konje et al., 2022).

While there have been scholarly attempts to enlighten readers on the link between citizens' hesitancy and the critical commentaries directed towards the vaccines by politicians in the country (Kabakama et al., 2022; Makoni, 2021; Mtani & Ngohengo, 2023), there is still a dearth of systematic academic inquiry addressing how subjective norms of both parents and peers could have influenced vaccination decisions among university students in Tanzania. Notably, theoretical and empirical evidence for the influence of subjective norms on various behaviours in the fields of social psychology and sociology is not scarce. With a direct focus on health, subjective norms are partly attributable to how much importance individuals attach to health promotion practices, particularly COVID-19 vaccination (Vaithilingam et al., 2023; Winter, Pummerer, Hornsey, & Sassenberg, 2022). Families, friends, schools/universities, and religious affiliations form standards which guide the conduct of their members, these standards of conduct are referred to as subjective norms (Ajzen, 1991). Adherence to established

norms facilitates acceptance in a group holding steadily to such norms (Musicka-Williams, 2020; Sprague, Maqsood & George, 2023), whereas non-adherence, especially in health context may call for resentment and exclusion (Lin et al., 2022).

The COVID-19 vaccination targets in Tanzania

When the vaccines were introduced in the country, lingering doubts from the previous administration still influenced the perceptions of many citizens. Despite the government's goal of vaccinating at least 60 per cent of the eligible population by June 2022, only 10 per cent had been fully vaccinated by September of the same year (Covidvax, 2022). This lower turn-up for vaccination could be attributed to the norms communicated by Tanzanian leaders during the World Health Organisation's initial approval of the vaccines. These norms expressed mistrust in the vaccines and, at times, claimed that the virus had been defeated through supernatural means (Makoni, 2021). Indeed, such concerns were not unique to Tanzania alone. In Finland, for example, some citizens perceived the vaccines as potentially immune-destructive, leading to hesitancy in obtaining them (Karlsson et al., 2021). Similar worries were prevalent in other countries where citizens expressed concerns about the relatively short period used to manufacture and test vaccines to confirm their efficacy and safety (Fauci, 2021). University students in Tanzania, falling within the age bracket eligible for the vaccination programme, were also impacted by the closure of universities when the virus was officially confirmed in the country (DeVylder et al., 2021; van Schalkwyk, 2020). However, there is a dearth of systematically documented evidence shedding light on how subjective norms held by significant influencers (specifically parents and peers)) might have influenced university students' decisions regarding vaccination.

Against this background, this study sought to achieve two specific objectives:

- 1. To explore how subjective COVID-19 vaccination norms at the family level influenced university students' response to the vaccination campaigns.
- 2. To assess peers' influence on university students' Covid-19 vaccination response.

To achieve these objectives, students were required to describe their vaccination status and how such status might have been influenced by their families and peers' subjective norms.

Literature Review

Subjective norms and its typology

Subjective norms refer to the subjective perception that important referents approve or disapprove of a particular behaviour (Ajzen, 1991). It is one of the three essential predictors of behavioural intentions in the theory of planned behaviour (TPB). Other two include attitude and perceived behavioural control (Ajzen, 1991). Despite its predi-

ctive utility, much of the positivist empirical work focusing on this predictor variable (Quinn et al., 2017; Zhang et al., 2021) suffers two recurrent issues in common: The first limitation is that these studies fall short of a rigorous analysis of the variable into its inherent dimensions to the point of treating it in a manner that reduces it to being a mere injunctive norm. This shortcoming is indeed reflected in the way that Ajzen defined it. There is, however, evidence for a distinction between subjective norms and injunctive norms, which suggests explicitly that the injunctive norm is a type of subjective norm which refers to the subjective perception that referents approve of a given conduct or the expected standard of conduct from people who are essential to an individual (e.g., religious leaders, parents, peers). It is this dimension that is mainly referred to in most of the studies which investigate the effect of subjective norms on behaviour, with the exception given to Cialdini, Kallgren and Reno (1991), Reid, Cialdini, and Aiken (2010), who clearly point out the importance of each dimension.

The second type of subjective norm is a descriptive norm, which entails the perception of the prevalence of a given behaviour in a referent group or subjective probability that referents perform the behaviour themselves (Cialdini et al., 1991). A combination of injunctive and descriptive norms, therefore, translates into a subjective norm. For the subjective norm to be a powerful determinant of behavioural intentions or actual behaviour, Morsky and Akçay (2019) maintain that there should be consistency between injunctive and descriptive norms. The "do as I say, and not as I do" tendency weakens norm adherence. Descriptive norms communicate "appropriateness" through action. They also serve the function of not only demonstrating appropriate behaviour but also enhancing one's self-efficacy, that is, "if X can do it, so can I". Conversely, they can lead to avoidance of behaviour in which similar others have shown reluctance to engage. There are studies, for example, that indicate that when the majority of the people surrounding an individual engage or avoid a particular behaviour, such as vaccination, chances are high that the individual will behave in a manner similar to that of their referents (Bergquist & Nilsson, 2019; Lapinski & Rimal, 2005). Based on this example, if the majority of an individual's friends forego vaccination, chances would be less for them to conceive the necessity of undergoing it.

The second concern is that of limiting the construct to having no direct impact on behaviour; that is, it only influences behaviour via the moderation of intention. However, there is evidence of a direct influence of the two types of norms on behaviour. The direct relationship has been established in studies that employed the social learning theory, demonstrating that individuals engage in behaviour after observing others doing the same. The possibility is heightened when they expect that the behaviour is socially or personally rewarding (Musicka-Williams, 2020).

The effect of parents' subjective norms on the behaviours of youths

While considered adults, the behaviours and life choices of youths are inevitably influenced by their parents' subjective norms, whether in the present or as cumulat-

ive effects of norms acquired from their parents since childhood (El Zaatari & Maalouf, 2022). A study on Human papillomavirus vaccination (HPV) involving college students revealed that students' HPV vaccination status and intention to get vaccinated were in part reliant on their parent's approval of the necessity to vaccinate (Glenn et al., 2021). This was due to their parents' concerns about the possible side effects of the vaccines on their daughters' health, sexual behaviours, and moral concerns, as well as the lack of understanding of how beneficial vaccination would be to males. Such concerns form a basis upon which social norms imposed by families with regard to COVID-19 vaccination are established and transmitted to family members (Doomekamp, van Leeuwen, van Gorp, Voeten, & Goeijenbier, 2020; Konstantinou et al., 2021).

A similar survey conducted by Euser, Kroese, Derks and Bruin (2022) on youths' willingness to undergo COVID-19 vaccination indicated a significant reliance on their parents' vaccination intentions. This suggests that individuals often have confidence in the behaviours modelled by their parents. In another study among youths in the United States regarding COVID-19 vaccination uptake (Lin et al., 2022), some informants reported getting vaccinated due to parental pressure, with parents insisting on vaccination as a condition for entry into their homes. The study also highlighted familial vaccination mandates that lead to family disruptions in the United States due to non-compliance with established vaccination norms within families.

The influence of peers' norms on health-seeking behaviour

Peer influence across a broad range of behaviours among adolescents and young adults has been extensively studied. Results consistently suggest that peer norms significantly impact behaviours such as substance use, sexual activity, and health-seeking behaviours of individuals within the social circle (Rogers, Cook, & Button, 2021; Seguya & Mgaya, 2021). In a sample of 916 teenagers, Rogers et al. (2021) observed that parents' and peers' norms were significant unique correlates of intention to obtain COVID-19 vaccination. Additionally, a qualitative study on the influence of peer norms on vaccination intent revealed that acceptance by vaccinated peers reassured unvaccinated individuals, providing them with a new accepting social network even if their biological relatives had isolated them for refusing vaccination (Lin et al., 2022). This acceptance bolstered the confidence of unvaccinated individuals in their decisions. While the existing evidence highlights the importance of subjective norms, further research is still needed to delve into the specific influence of each type of norm.

Methodology

This article presents qualitative findings from a mixed methods study employing an explanatory sequential design. This design involved initially collecting quantitative data from 532, among whom reported being vaccinated first, followed by qualitative data, and the two sets merged at the stage of reporting. It emerged that fifty-nine (59)

out of 532 participants in the quantitative phase reported to have been vaccinated. For qualitative data, researchers revisited the research site and purposively recruited twelve (12) students who had been vaccinated for interviews. These students were identified through their stated programmes during the quantitative survey. The rest were recruited using convenience sampling, bringing the total to thirty-three interviewees. All face-to-face interviews were conducted in Kiswahili at the University of Dar es Salaam Main Campus. The interviews were recorded using a digital sound recorder with the consent of participants, the majority being females (55.5 per cent). Each interview lasted approximately 20-35 minutes. The combined use of purposive and convenience sampling techniques aimed to gather trustworthy information from credible informants, providing insights into how subjective norms influenced their COVID-19 vaccination status. The researchers considered the obtained information as dependable and transferable to the broader population, as argued by Maxwell (2020).

Study area

This study was conducted at the University of Dar es Salaam's main campus. It involved third-year students who were selected purposely on the grounds that they had already been admitted to the university during the second wave of the pandemic and the time when the vaccination campaigns were initiated. The University of Dar es Salaam is the oldest in the country and attracts students from all over the country, providing a total of 370 programmes to nearly 40,000 students. Situated in a bustling commercial city that attracts a considerable influx of visitors from both domestic and international origins, the city was undeniably exposed to a comparatively elevated risk of COVID-19 when juxtaposed with other locales in the country.

Data analysis

The data were transcribed verbatim, and transcripts were translated into English by a language expert. Researchers read the transcripts several times to gain familiarity with the data. After this stage, the data were reduced to meaningful codes from which a search for recurring patterns and themes was done. Generated themes were further reviewed and aligned to the specific research objectives, as shown in Table 1. Overall, the thematic analysis revealed that dialogues at the family level and anticipation of benefits as orchestrated by peers influenced students' vaccination decisions both descriptively (own vaccination status) and injunctively (perception of whether obtaining vaccination was necessary or not). After aligning the themes with the specific objectives, the results were reported with the aid of seven (7) direct quotes from interview transcripts. This process is described at length by Braun and Clarke (2006, pp. 87-93).

Table 1Themes and sub-themes relating to the influence of subjective norms

Objective	Themes	Sub-theme	Dimension
The influence of parents' subjective norms	Parent-child dialogues	Parents' perception that vaccination was a protective strategy against Covid-19. Parents' willingness to let their children choose what to do. Parents' concerns about likely side effects of obtaining vaccination.	norms
Influence of peers' norms	Anticipated benefits of obtaining vaccination	Job maintenance. Door-way to travelling.	norms Injunctive

Source: Fieldwork (2023)

Ethical considerations

This study received approval from the research committee of the University of Dar es Salaam School of Education, and a research clearance letter was obtained from the University authorities. Additionally, the Director of Research and Publication of the School of Education granted the researchers permission to collect data from the students. Each interviewed student was apprised of the study's objectives and informed of their right not to answer questions they deemed compromising to their privacy, along with the option to withdraw from the interview at any time. After clarifying their rights and assuring them of data confidentiality, consent was secured for recording their voices. Subsequently, interviews were conducted, and direct quotes were extracted without disclosing the actual names of the interviewees.

Findings and Discussion

As argued by Cialdini et al. (1991), both injunctive and descriptive norms can be either perceived or actual. This study's findings revealed that the norms influencing the participants' vaccination decisions were more actual than perceived. The influence of opinions (injunctive norms) and actions (descriptive norms) of parents and peers on students' Covid-19 vaccination uptake was evident in several interviews that were conducted with them. These findings are presented in the sections that follow.

Vaccination decisions as influenced by conversations in the family

This study revealed that parents were influential either by encouraging them to vaccinate or by discouraging them. Some parents were of the view that taking the vaccine was a necessary step if their youthful offspring were to be safe while at the campus, where they interacted with one another on a regular basis during the pandemic. Indeed, the majority of the informants who reported having been vaccinated revealed that they were either influenced by their parents or were supported by them when they saw the need to obtain the vaccination. The excerpts from interview transcripts reveal the role played by parents whose conversations with their offspring greatly influenced their response to the call to vaccinate.

Parents' perception that obtaining vaccination was a protective measure against Covid-19

Evidence shows that vaccine acceptance among certain students was attributed to their parents' belief that the vaccines would safeguard them from potential infection. This perception laid the foundation for favourable COVID-19 vaccination subjective norms involving both injunctive and descriptive elements. Parents who perceived the benefits of vaccination not only encouraged their children to get vaccinated but also served as role models by receiving the vaccine themselves. In some cases, parents' recognition of the importance of vaccination intersected with their children's perception of the risk of infection, contributing to increased adherence. During an interview with one student, it became apparent that both the student and her parent used to believe that the disease primarily affected older individuals with weakened immunity due to advanced age. However, this belief shifted after a close friend of the parent tragically lost a young son to a confirmed case of COVID-19. The student openly attested that:

My father was vaccinated when he was out of the country, but he was not bothered about us because he knew we had sufficient immunity. But after attending the funeral of a young man who was the son of his former staff mate and had succumbed to COVID-19, he encouraged both me and my elder sister to get vaccinated immediately. We immediately went to get vaccinated in response to his urge (Female Student, UDSM Main Campus).

The quote above highlights that, initially, the perception of the disease was that it selectively affected certain age groups. Many individuals held the belief that specific age categories were not susceptible to infection, leading to reluctance to take preventive actions or advocate for such measures among those deemed immune. The implication is that when the perceived risk of infection is low or non-existent, the establishment of a norm promoting precautionary measures becomes unlikely. However, when a tangible threat, such as the death of an individual similar to a loved

one, becomes apparent, the likelihood of a norm supporting a specific health promotion behaviour increases significantly. This finding concurs with Karlsson et al. (2021), who reported that a higher perceived risk of COVID-19 was associated with greater acceptability of obtaining vaccination in many families in the USA. Further to the perception of risk, adherence to parental guidance on an issue that had attracted much controversy was backed by the fact that parents themselves were vaccinated.

The findings also align with Glenn et al. (2021), who observed that vaccination against HPV among a reasonable number of undergraduate students in the United States was partly determined by the extent of trust that their parents had in the vaccines. Scholarship indicates that when a referent who prescribes a behaviour performs the prescribed behaviour, the self-efficacy of the observer to do the same goes high up, and this facilitates behaviour uptake by way of imitation (Morsky & Akçay, 2019; Schunk & DiBenedetto, 2020). Similarly, there is an implication that when parents obtained vaccination, a process of cognitive reconstruction took place, which was facilitated by the reduced fear towards the vaccines that had been induced in the beginning by the political elites. Parental influence, as suggested by the evidence obtained in this study, confirms Euser et al. (2022), who maintained that youths' willingness to undergo COVID-19 vaccination in the Netherlands was heavily dependent on their parents' intention to undergo the same.

The influence of parents' subjective norms, however, does not rule out the importance of personal norms (Sprague et al., 2023). Individuals with sound and independent minds are not obliged to give in to pressure from referents as they, too, have a choice to make as adults and remain responsible for the outcomes of their actions. Despite the urges from some parents, some individuals remained hesitant, holding on to their beliefs that there was no pressing need to obtain vaccination. A male student at UDSM openly revealed that "I am not vaccinated, and I do not expect to do so, though my family wanted me to". This is an indication of basically two issues; one being that, though parents who perceived COVID-19 vaccines to be beneficial wished that their family members be vaccinated, they never forced them to do so. Secondly, each family member harboured individual concerns regarding the vaccines, and these concerns remained unchanged until they were potentially convinced of the necessity and reassured that the actual outcomes would align with the anticipated benefits. Such findings support Lin et al. (2022), who reported that some youths in the USA preferred isolation by their families to vaccination against COVID-19 because they were not convinced that the vaccines were safe.

Parents' willingness to let their children do what they perceive to be right

The supportive role of parents and their willingness to let their children do what they judged to be right was expressed by participants in the field. One of the interviewees, for example, expressed that she was very afraid of getting infected and dying painfully

from COVID-19 due to the stories she had heard about people who had suffered and succumbed to the disease.

I was afraid of pandemic and people who died from it. Based on stories I heard, they died painfully. So, I informed my parents about my concerns, and they were very supportive; our parents would let us do anything that we considered to be right (Female Student, UDSM – Main Campus).

The above quote shows that the decision to get vaccinated was, in some cases, based on the personal moral obligation of ensuring the safety of the self, resulting from one's perception of the risk of COVID-19. This moral obligation was further energised by supportive norms from parents who were willing to let their children practice what they felt was good for them regardless of whether the parents themselves were vaccinated or not. A personal obligation to pursue a certain health promotion behaviour may be enhanced when individuals perceive that they can execute the behaviour (Schunk & DiBenedetto, 2020) and that the behaviour will benefit the individual by averting the risk of getting an infection (Karlsson et al., 2021), which goes in line with studies by Lin et al. (2022), and Radic, Koo, Gil-Cordero, Cabrera-Sanchez and Han (2021) which attached vaccination acceptance among youths to entirely personal desire to enhance their immunity. Another implication that could be drawn from this finding is that parental support enhances the perception of control over a behaviour because individuals act freely without fear of reproach.

Parents' worries about the safety of the vaccines as a factor for hesitancy

The role of parents was not one-directional; there were some students (n = 5) who reported that in addition to the fact they were themselves hesitant to get vaccinated, their parents too strongly discouraged them from getting vaccinated, arguing that the vaccines were not safe for them; it should be recalled, that the time that was taken to develop the Covid-19 vaccines was much shorter than usual which made some to perceive them as experimental (Fauci, 2021). The beliefs held by parents put their children in a dilemma at some point in the sense that they contradicted statements from experts; one of the students recalled in an interview that:

My parents were firmly against it; at the school where my elder sister taught, all the teachers (foreigners) were vaccinated. They even brought Doctors to tell them about the importance of getting vaccinated, but our mother was totally against the idea, maintaining that the vaccines were not safe for us (Female Student – UDSM Campus).

The illustration above shows that there were worries among many people, which made them hesitant and discouraged those they cared for from getting vaccinated. Some concerns were that obtaining vaccination would possibly lead to infertility and that girls especially would never be able to have children. The choice to follow parental advice in place of experts' prescriptions is an indicator of the trust that youths in collectivist societies like Tanzania have in their parents and the importance they attach to adhering to what their closest people perceive to be desirable. This finding is similar to Glenn et al. (2021), who reported that in addition to medical practitioners' influence, many college students attributed their HPV vaccination attitudes to the opinions that their parents had of the same vaccines with regard to the possible side effects, and the same induced attitudes influenced both their intention and actual vaccination status.

Another of the worries which caused parents to discourage their children from vaccinating was based on the belief that the vaccines could destabilise the natural immune system. The same interviewee further revealed that:

Our parents were concerned about the possibility of having our natural immunity ruined by the vaccines to the point that a time would come when our survival would entirely depend on vaccines and boosters (Female Student, UDSM Main Campus).

Concerns about the likely side effects of the vaccines were everywhere in traditional and social media. It is reported that even in the developed world where the vaccines originated, they were feared more than the virus itself (Karlsson et al., 2021) due to possible side effects that were feared to be unveiled in the future. Parents' concerns about the likelihood that their youth would be affected by the new vaccines are not particular to Tanzania alone. A study among youths in Germany confirmed that one's vaccination status and determination to get vaccinated reduced with increased worries by their parents for vaccine-related side effects (Zychlinsky et al., 2022).

The influence of peers' subjective norms

There were a few respondents who attributed their vaccination status to their peers' norms. It was revealed that peers influenced their friends more through injunctive than descriptive norms, and conformity was subject to an expectation of desirable outcomes (anticipated benefits), which were not health-oriented but instead averted the possibility of being excluded from opportunities. Two students reported to have been engaged as part-time employees in institutions where protection of self and others was a norm to which all team members had to abide in order for them to maintain membership. This was captured in the following quotation:

I got vaccinated at the beginning of the vaccination campaign. I used to work at an international school as a sports master (coach), where getting vaccinated was a requirement to keep my job. I spent much time with kids from different countries where vaccination was embraced. So, it was a condition that all teachers get vaccinated (Male Student – UDSM Main Campus).

Human behaviour is, at large, driven by outcome expectancies; desirable outcomes increase behaviour uptake possibilities (Schunk & DiBenedetto, 2020). The illustration

above shows that though some individuals did not intend to vaccinate, they had to do so not for personal protection, as was the case in Karlsson et al. (2021) and Lin et al. (2022) studies, but to attract the extrinsic outcome, involving maintaining their jobs. This kind of behavioural engagement is what the behaviourists refer to as avoidance conditioning; that is, a situation where an individual practices a behaviour that reduces or eliminates the possibility of an adverse event occurring (Claes, Grombez & Vlaeyen, 2015). Obtaining vaccination under such circumstances could, in the long run, lead to psychological discomfort if the prime factor for the uptake was not within the individual's values but rather an imposition from the outer environment.

Peers' concerns about the possibility of travelling abroad

The study revealed that anticipations to travel outside the country served as both a motivating factor and a predictor of vaccination intent. Some respondents (n = 4) got vaccinated out of concern that proof of vaccination could be a requirement for them to travel outside the country. This concern was expressed as follows:

I got vaccinated three weeks after the vaccines were imported as I had plans to travel after finishing my second-semester examinations. It was not because of my willingness, but I learnt from my friends that it would be hard for me to go abroad without proof of having been vaccinated. Rather than that, I wouldn't (Female Student, UDSM Main Campus).

The extract above suggests that though there were no explicit vaccination mandates at a country level, there were injunctive norms that required that one had to be vaccinated to be accepted in countries where COVID-19 vaccination was a norm. Youths who expected to travel outside the country to look for jobs and visit their relatives were worried that they would, at some point in time, be frustrated if they were not vaccinated. According to the Ministry in Charge of Health, it was mandatory that "travellers entering Tanzania and returning residents who are fully vaccinated will be exempted from... and Rapid Antigen Test requirements upon presentation of a valid vaccination certificate with a quick response code for verification upon arrival" (Ministry of Health, 2022).

Peer influence by way of injunctive norms rather than descriptive norms is an indicator of low uptake of COVID-19 vaccination, which could have been a result of low-risk perception or the norms of their other peers, personal factors or other factors as reported in the previous subsections. There is evidence that parents influence the behaviours that are inherent in their children's social networks (Doomekamp et al., 2020; Kuntsche et al., 2017). The influence of peers' norms on vaccination refusal and uptake was reported in the United States, where friends were willing to accept their anti-vaxxing colleague as part of their own families after being isolated by their biological relatives for refusing to vaccinate (Lin et al., 2022). This gave them psychosocial support that would enable them to live according to their own beliefs.

Conclusion

While previous quantitative studies have indicated that subjective norms influence behaviour by moderating intention, the results of this qualitative inquiry suggest that parents' explicit subjective norms can potentially impact the health promotion behaviours of university students. Despite the fact that university students are considered adults, their health-enhancing behaviours, as well as those of young individuals in the broader population, may not be entirely independent of the influence of those around them. This holds water when both parties acknowledge the importance of the behaviour and when the injunctive norms of the referents align with their descriptive norms, thereby boosting self-efficacy and trust in the advocated behaviour. Regarding the influence of peers, it is concluded that peers shape vaccination decisions through their injunctive norms, highlighting the potential extrinsic benefits of getting COVID-19 vaccination, even if they have not been vaccinated themselves. This emphasis on extrinsic benefits suggests that young individuals, in general, may underestimate the likelihood of facing a current health challenge.

Recommendations

The promotion of health promotion behaviours among university students should prioritise raising awareness of the severity of the prevailing health crisis and the benefits of recommended actions. This cultivates a sense of personal obligation to take action for self-protection and the protection of others. Moreover, awareness efforts should extend to individuals they trust most, such as parents and peers. When these influential figures prescribe and align their behaviours with recommended norms, the impact of norms from more distant sources becomes less potent. Based on this evidence, it appears that some parents were not supportive of COVID-19 vaccination due to the fear of possible side effects that they had heard about from social media. Therefore, this study recommends that medical practitioners and health psychologists should be empowered by respective authorities to enlighten citizens about any health promotion interventions to dispel misinformation that can frustrate intervention programmes that are geared towards enhancing the well-being of citizens.

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