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University of KwaZulu-Natal Occupational Therapy students' experiences of online assessments and feedback during the COVID-19 pandemic in South Africa.

ABSTRACT

INTRODUCTION: The COVID-19 pandemic brought about a global crisis in higher education, where students were required to transition to exclusive online teaching and learning. This study explored students' experiences of online assessments and feedback to inform future practice.

METHODOLOGY: This study utilised a descriptive cross-sectional quantitative design with purposeful sampling to describe student's experiences of online assessments. Data was collected from occupational therapy students in 2022. The Assessment Experiences Questionnaire was sent to participants (n=166). Data was analysed using SPPS version 28.

FINDINGS: Students reported that 'tackling' assignments made them think (79.75%; n=63). More than half of the students learn more from doing assignments than studying course material (61.25%; n=49). Majority of students felt they did not receive timely feedback through online assessments (67.5%, n=54), which impacted learning. More than half of the students use feedback in preparation for assignments (56.25%; n=45), hence timely and quality feedback is needed.

CONCLUSION: Occupational Therapy students had a positive experience of online assessments; however, the transition was difficult. It is recommended for lecturers to consider the difficulty of online assessments, the number of assessments and timely feedback for an effective online learning process.

KEYWORDS: COVID-19, Students experiences, Online assessments, Feedback, University of KwaZulu-Natal

INTRODUCTION

The COVID-19 pandemic brought about a global crisis in higher education, including healthcare education[1]. In March 2020, South Africa went into lockdown, and COVID-19 protocols were necessitated, forcing the higher education industry to make urgent decisions on disseminating learning materials and content in alternate and remote methods.

Transitions were thus required to preserve the academic year; one of which was exclusive online teaching and learning as opposed to blended learning with in-person lectures and practicals. It also included learning how to use various online platforms for teaching and learning. For Occupational Therapy students enrolled in the programme at the University of KwaZulu Natal (UKZN), there are various practical components that contribute to the students' final weighted mark[2]. All these assessments were amended for online delivery. These assessments were quality assured using the UKZN-approved policies and

procedures[3]. The transition to online learning and assessments meant fewer practical examinations and physical resources.

This transition was not without its challenges. Since transitioning to online learning and assessments, UKZN students had to be familiar with Zoom technology[2]. Students and lecturers also needed to be familiar with the online learning platform (Learn2021 - Moodle) used for online assessments. Many UKZN students initially had unequal access to technology during the lockdown, placing them at a disadvantage compared to their peers[1]. UKZN students funded by the National Student Financial Aid Scheme (NSFAS), the first time in 2020, had not received laptops by the time the academic programme had begun. After some time, NSFAS and UKZN were able to counteract this for students qualifying for assistance by providing them with a laptop and data packages that could be utilised for their online learning and assessments.

There have been several factors identified from studies that either promote or impede successful online assessments during the COVID-19 pandemic. Online assessments were found to be more prone to experience technical difficulties, resulting in class disruption and decreased participation[4]. Infrastructural impediments, such as power outages disadvantage some students when undertaking online assessments[5]. Despite the UKZN assessment policy, indicating that students are accountable for adhering to the rules and regulations governing assessments and must conduct themselves ethically and responsibly when completing assessments, this proved more difficult to monitor online[6]. The likelihood of cheating increases with online assessments as no invigilators are physically present to monitor the integrity of the assessment process. Feedback from assessments forms an integral part of the assessment process[7]. One study reported that there was a lack of feedback to students from lecturers regarding assessments[4]. According to Mandasari[8], online assessments also affected the motivation to learn and perform well in an online exam.

There are advantages to online learning and assessments despite drawbacks. The benefits of UKZN online teaching and learning include having instant access to content on any device, making content easily accessible[9]. Moreover, online assessments provide flexibility because students can write from their homes rather than travelling to a specified location. This saved time and money for both students and lecturers[10].

Given that online assessments have been embedded into the Occupational Therapy curricula, it is essential to evaluate students' experiences of these online assessments as an

understanding of student opinion can be useful in identifying barriers and enablers of using online tests in undergraduate education[11].

LITERATURE REVIEW

I. Online learning and teaching

Since the advent of higher education in South Africa, most South African universities and schools have depended on face-to-face teaching and learning. Face-to-face teaching and learning provide real-time and practical contact with resources such as libraries and occur within a specified contact time, resulting in quick and understandable feedback to students[12]. UKZN utilised a student-centred remote teaching and learning plan, which emphasised student learning, by informing activities of teaching teams to provide students with a reliable response to their learning needs[7]. One of the principles utilised by UKZN regarding the project plan during COVID-19, recommended a single joint session, where both the teaching team and students can engage[7]. Within this session, questions and answers were discussed and recommendations provided for preparation for assessments[7].

As students faced COVID-19, there was a swift adjustment to online learning which left students feeling despondent and anxious as this new way of life was different to what students and lecturers were accustomed to[13]. Academic faculty were compelled to rethink their curriculum as the transition to an online platform encouraged problem-solving, critical thinking, and applied understanding through a holistic and integrated approach[9].

Some of the advantages of online learning and teaching included the use of online discussions which allowed students to participate in the discussion without the fear of excessive attention or confrontation and to engage in the lessons from the comfort of their environments[14]. This also allowed students to engage equally, support each other's points, and offer new channels of knowledge[9]. Moreover, the extensive use of online learning management platforms such as Zoom®, voice-over PowerPoints and tutorials allowed for increased participation and the ability to revisit materials. Online student assessments included the utilisation of technology to provide in-depth feedback on particular sections of students' work through automated immediate marking, thus facilitating learning of content in action and enhancing students understanding of the assessment content and feedback[9]. Baczek et al's study[15] among 804 Polish medical students found the main advantages of online learning to be continuous access to online materials (69%), learning at your own pace (64%) and comfortable surroundings (54%). One of the main disadvantages reported was technical problems with technological tools (54%)[15].

ii. Online assessments

Online assessments became the core method of student assessment and learning during the pandemic. Lecturers preferred students to have access to required resources to enhance their learning and understanding of the content while ensuring examination integrity[16]. The UKZN Policy on assessments states that assessment practices should be aligned to the highest quality management principles, should be appropriate to the qualification levels and module programme outcomes and a responsible translation of the policy into assessment practices to ensure any quality audit or evaluation can show evidence of sound assessment practice. Students are responsible for reading, understanding and complying with the rules and regulations related to assessments in the modules and the programme for which they are registered; for using assessments to engage in critical self-evaluation of progress towards learning outcomes; and for behaving ethically and responsibly in the conduct of assessment tasks as stipulated in module outlines, College Handbooks and University Academic Rules[17].

In a study carried out at a university in the southeast of the United States[18], there was no discernible difference in the students taking online examinations in terms of effort or achievement. According to the study, online evaluations give convenience benefits rather than intellectual excellence[18]. The study concludes that the usage of online tests under the assumption that they have no extreme differences on students' marks.

Feedback during the learning process and following assessment is essential, and feedback should serve the purpose of enhancing learning[9]**.** Lizzion and Wilson[19] examined and assessed the student's understanding of the value and efficacy of feedback on assessment in a case study. The study analysed the feedback that 57 students had received on various assignments and identified the traits of both cooperative and uncooperative lecturer comments. The findings of this study demonstrated that providing feedback had a large and significant impact on the students' degree of learning, and that increase in learning and improvement in assessment is mostly linked to how well students perceive effective feedback[20]. Another study indicates that feedback should be provided in a timely manner as well cumulatively, this shows that feedback must be provided while it still matters to students[21]. Students that receive feedback in a timely manner benefit from the feedback as opposed to feedback received later.

iii. Measuring the response of students to assessments

The Assessment Experiences Questionnaire (AEQ) was the tool used in this study. The AEQ correlated with the research questions relating to the experiences and assessment

preparation related to online assessments[21]. The AEQ examined the extent to which students experienced various learning conditions on the whole programme of study. It consisted of 28 items across nine sub-scales linked to learning conditions from assessment, with one overall satisfaction item. In 2019, Dawson and his team used the AEQ in the first year of higher education and discovered that using feedback was associated with confidence in achieving effective study skills and marks, regardless of the quantity and quality of feedback[22]. This indicated that there is a link between the feedback and its association to confidence in achieving effective study skills and marks. Jessop and Maleckar[23] also employed the AEQ in their study of students across three disciplines who reported poor levels of learning from examinations, which they attributed to the lack of feedback from examinations. These are indicative that the AEQ may be beneficial in eliciting student perception and experiences with regards to online assessments and feedback during the COVID-era of online teaching and learning[24].

METHODOLOGY

Aim

The purpose of this study was to describe University of KwaZulu-Natal Occupational Therapy students' experiences of online assessments and feedback during the COVID-19 pandemic in South Africa.

Study design

This study utilised a descriptive cross-sectional quantitative design[25].

Study Setting

The study was undertaken at the University of KwaZulu-Natal, located in South Africa and the only tertiary institution offering Bachelor of Occupational therapy programme in the province.

Study population and sampling

The participants were limited to Occupational Therapy students within the College of Health Sciences. The sample was selected using non-probability purposive sampling[26]. All students enrolled from year one to year four (N= 166 students) in 2022 were included. This included 32 first-year students, 53 second-year students, 34 third year and 47 fourth-year students. The pilot study participants (n=11) included physiotherapy students who were completing their final year of study in 2022. Physiotherapy students were chosen for the pilot study as they were health science students whose field of study was closely affiliated with occupational therapy. Within this selected cohort, first year to third year Occupational

Therapy students would have had their last written face-to-face assessment in secondary school. Thus the sampling ensured that all students would have had a minimum of two years (2020-2022) experience of online assessments. The current study's required sample size based on calculation was 116.

Data collection

The AEQ[27] used to collect data for the study was hosted on Google Forms. The AEQ comprised six subsections answered on a Likert Scale, ranging from (1) indicating strong disagreement to (5) indicating strong agreement. Subsection one included six questions related to the amount and distribution of study effort. Subsection two included six questions related to assignments and learning at an undergraduate level. Subsection three included six questions on the quantity and timing of feedback. Subsection four included six questions on the quality of feedback provided on assessments. Subsection 5 included six questions on what is done with the feedback provided. Subsection six included six questions on examination and learning (during the COVID-19 pandemic).

Following ethical approval, the link to access the google documents form was distributed to all registered UKZN Occupational Therapy students for 2022 via WhatsApp and E-mail. The survey was opened for a span of 6 weeks and reminders were sent across all year groups on WhatsApp twice per week and weekly to the administration distributor via email.

Data Analysis

The data from Google Forms were imported to an MS Excel spreadsheet in preparation for analysis conducted on the Statistical Package for Social Sciences (SPSS) version 28. A p value < 0.05 was considered statistically significant. The demographic data were converted into categorical data. The categorical variables were described as counts and percentage frequencies. To determine the association between categorical variables, Chi-Square Test and p values were used.

Factor analysis was used working along the statistician to take all of the information collected in the study and synthesise it into a smaller data set which was more understandable and manageable[28]. This allowed for identifying patterns demonstrating correlations between variables which overlapped[28].

Validity and Reliability

A study conducted by Batten and colleagues[24], delivered conflicting results about the statistical validity of the AEQ. Whilst the AEQ has been successful in measuring and allowing

for interpretation of results across the different components within the AEQ in relation to students' perceptions of assessments, the lack of clarity and specificity in the AEQ were said to negatively influence the validity of the AEQ, with some items in the questionnaire being open to misinterpretation by being quite vague, making it difficult for respondents to answer accurately[24].

Ethical clearance and considerations

Gatekeeper permission from the Registrar of the UKZN and ethical approval from the University of KwaZulu-Natal's Human and Social Sciences Research Ethics Committee (HSSREC/00004148/2022) was obtained prior to commencement of the study. Ethical principles of anonymity were adhered to in this study by deidentifying biographical data. Trustworthiness, credibility, transferability was also adhered to.

RESULTS

A total of 80 students (19 first-years, 19 second-years, 20 third-years and 22 fourth-years) voluntarily participated in the study.

Majority of the students indicated being at the proficient level of computer literacy (n=60; 75%) and have access to electronic devices at home (n=75; 93.8%) and internet access (n=66; 82.5%)

The amount of study time and effort UKZN Occupational Therapy students' invest towards learning: Most students across the years reported that they do not study the same amount each week, regardless of whether an assignment is due or not (65.82%; n=52).The first years (n=12; 63.16%) reported that they only study things that are going to be covered in the assignments. Across all years, the majority of the students reported that in weeks that assignments are due, they put in more hours (80% n=64). However, more than half of the students across all years felt that studying regularly is required to do well on the course (67.5%; n=54) and the majority also reported that it is not possible to do quite well without studying in the Occupational Therapy course (77.5%; n= 62).

All p-values were $p>0.05$ of amount and distribution of study effort across all years questions, except for studying regularly to do well on the course ($p = 0.015$), indicating a significant difference between years (Table I).

Table I: The amount of study time and effort UKZN Occupational Therapy students invest towards learning

Amount and distribution of study effort		1st year n (%)	2nd year n (%)	3rd year n (%)	4th year n (%)	p-value	Overall n (%) 80 (100)
		n=19(23.75)	**n=19(23.75)**	**n=19(23.75)**	**n=22(27.5)**		**n=79**
Sufficient study time regardless of assignment due	Agree	4 (21.05)	4 (21.05)	1 (5.26)	0 (0)	p = 0.152	9 (11.39)
	Neutral	6 (31.58)	2 (10.53)	4 (21.05)	6 (27.27)		18 (22.78)
	Disagree	9 (47.37)	13 (68.42)	14 (73.68)	16 (72.73)		52 (65.82)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Selective about what to study and learn and still do well	Agree	7 (36.84)	7 (36.84)	4 (20.00)	7 (31.82)	p = 0.561	25 (31.25)
	Neutral	5 (26.32)	6 (31.58)	10 (50.00)	10 (45.45)		31 (38.75)
	Disagree	7 (36.84)	6 (31.58)	6 (30.00)	5 (22.73)		24 (30.00)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Only study work covered in assignments	Agree	12 (63.16)	8 (42.11)	7 (35.00)	9 (40.91)	p = 0.649	36 (45.00)
	Neutral	1 (5.26)	2 (10.53)	4 (20.00)	3 (13.64)		10 (12.5)
	Disagree	6 (31.58)	9 (47.37)	9 (45.00)	10 (45.45)		34 (42.50)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Study regularly to do well on the course	Agree	14 (73.68)	17 (89.47)	11 (55.00)	12 (54.55)	p =0.015*	54 (67.50)
	Neutral	0 (0)	1 (5.26)	7 (35.00)	8 (36.36)		16 (20.00)
	Disagree	5 (26.32)	1 (5.26)	2 (10.00)	2 (9.09)		10 (12.5)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Possible to do quite well without studying much	Agree	6 (31.58)	1 (5.26)	3 (15.00)	1 (4.55)	p = 0.058	11 (13.75)
	Neutral	0 (0)	3 (15.79)	1 (5.00)	3 (13.64)		7 (8.75)
	Disagree	13 (68.42)	15 (78.95)	16 (80.00)	18 (81.82)		62 (77.5)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
In weeks assignments due – one puts in more hours	Agree	14 (73.68)	17 (89.47)	14 (70.00)	19 (86.36)	p = 0.800	64 (80.00)
	Neutral	3 (15.79)	1 (5.26)	4 (20.00)	1 (4.55)		9 (11.25)
	Disagree	2 (10.53)	1 (5.26)	2 (10.00)	2 (9.09)		7 (8.75)

*p<0.05 indicates a significant difference

UKZN Occupational Therapy students' experiences of online assessments and learning during COVID-19: There were no significant differences between years with p>0.05 for all items (Table II). Most of the students across the years found that tackling assignments made them think (78.75%; n=63) and they found the assignments to be very challenging (76.25%, n=61). More than half of the students across all years felt that they learn more from doing the assignments than studying the course material (61.25%; n=49) and agreed that you cannot get away with not understanding the work but still get high marks (57.5%; n=46).

Table II: Students experiences with online assessments and learning during COVID-19

Assessments and learning		1st year n (%)	2nd year n (%)	3rd year n (%)	4th year n (%)	p-value	Overall n (%) 80 (100)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=21(26.26)**		**n=79**
Tackling assignments makes one think	Agree	16 (84.21)	15 (78.95)	15 (75.00)	17 (80.95)	p = 0.840	63 (79.75)
	Neutral	2 (10.53)	4 (21.05)	4 (20.00)	3 (14.29)		13 (16.46)
	Disagree	1 (5.26)	0 (0)	1 (5.00)	1 (4.76)		3 (3.80)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Learn more from doing assignments than studying the course material	Agree	12 (63.16)	9 (47.37)	16 (80.00)	12 (54.55)	p = 0.082	49 (61.25)
	Neutral	0 (0)	0 (0)	0 (0)	2 (9.09)		2 (2.50)
	Disagree	7 (36.84)	10 (52.63)	4 (20.00)	8 (36.36)		29 (36.25)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Completing assignments and get away with not understanding the work but still get high marks	Agree	6 (31.58)	3 (15.79)	4 (20.00)	2 (9.09)	p = 0.396	15 (18.75)
	Neutral	5 (26.32)	5 (26.32)	5 (25.00)	4 (18.18)		19 (23.75)
	Disagree	8 (42.11)	11 (57.89)	11 (55.00)	16 (72.73)		46 (57.5)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Assignments give clear instructions about what is expected to do	Agree	8 (42.11)	5 (26.32)	4 (20.00)	2 (9.09)	p = 0.259	19 (23.75)
	Neutral	4 (21.05)	7 (36.84)	13 (65.00)	13 (59.09)		37 (46.25)
	Disagree	7 (36.84)	7 (36.84)	3 (15.00)	7 (31.82)		24 (30.00)
		n=19(23.75)	**n=19(23.75)**	**n=19(23.75)**	**n=22(27.5)**		**n=79**
When tackling assignment, it is not clear what would count as successful answer	Agree	6 (31.58)	12 (63.16)	4 (21.05)	9 (40.91)	p = 0.252	31 (39.24)
	Neutral	8 (42.11)	7 (36.84)	10 (52.63)	8 (36.36)		33 (41.77)
	Disagree	5 (26.32)	0 (0)	5 (26.32)	5 (22.73)		15 (18.99)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
The assignments are not very challenging	Agree	3 (15.79)	0 (0)	3 (15.00)	1 (4.55)	p = 0.632	7 (8.75)
	Neutral	3 (15.79)	3 (15.79)	3 (15.00)	3 (13.64)		12 (15.00)
	Disagree	13 (68.42)	16 (84.21)	14 (70.00)	18 (81.82)		61 (76.25)

Experiences in terms of quantity and timing of feedback given to UKZN Occupational Therapy students: All of p-values were above p>0.05 indicating no significant difference between years (Table III).A number of students across the years felt that on this course, they do not get plenty of feedback on how they are doing (42.5%; n=34) and more than half of the students reported that the feedback is not delivered timeously (67.5%, n=54). A number of students across all years found that whatever

feedback they do get comes too late to be useful (47.5%, n=38), and majority agreed that they would learn more if they received more feedback (77.5%, n=62).

Table III: Experiences in terms of quantity and timing of feedback given to UKZN Occupational Therapy students

Quantity and timing of feedback		1st year n (%)	2nd year n (%)	3rd year n (%)	4th year n (%)	p-value	Overall n (%) 80 (100)
		n=19(23.75)	n=19(23.75)	n=20(25)	n=22(27.5)		n=80
Get plenty of feedback on this course	Agree	4 (21.05)	4 (21.05)	3 (15.00)	8 (36.36)	p = 0.314	19 (23.75)
	Neutral	6 (31.58)	8 (42.11)	9 (45.00)	4 (18.18)		27 (33.75)
	Disagree	9 (47.37)	7 (36.84)	8 (40.00)	10 (45.45)		34 (42.5)
		n=19(23.75)	n=19(23.75)	n=20(25)	n=22(27.5)		n=80
Feedback comes very quickly	Agree	3 (15.79)	0 (0)	2 (10.00)	3 (13.64)	p = 0.158	8 (10.00)
	Neutral	6 (31.58)	3 (15.79)	6 (30.00)	3 (13.64)		18 (22.50)
	Disagree	10 (10.53)	16 (84.21)	12 (60.00)	16 (72.73)		54 (67.50)
		n=19(23.75)	n=19(23.75)	n=20(25)	n=22(27.5)		n=80
Hardly any feedback in assignments when received back	Agree	8 (42.11)	3 (15.79)	5 (25.00)	12 (54.55)	p = 0.108	28 (35.00)
	Neutral	3 (15.79)	8 (42.11)	8 (40.00)	4 (18.18)		23 (28.75)
	Disagree	8 (42.11)	8 (42.11)	7 (35.00)	6 (27.27)		29 (36.25)
		n=19(23.75)	n=19(23.75)	n=20(25)	n=22(27.5)		n=80
When things are wrong or misunderstood – there's not much guidance about it	Agree	8 (42.11)	9 (47.37)	9 (45.00)	12 (54.55)	p = 0.765	38 (47.50)
	Neutral	4 (21.05)	6 (31.58)	4 (20.00)	7 (31.82)		21 (26.25)
	Disagree	7 (36.84)	4 (21.05)	7 (35.00)	3 (13.64)		21 (26.25)
		n=19(23.75)	n=19(23.75)	n=20(25)	n=22(27.5)		n=80
Learn more if received more feedback	Agree	12 (63.16)	16 (84.21)	15 (75.00)	19	p = 0.461	62 (77.5)
	Neutral	3 (15.79)	3 (15.79)	4 (20.00)	2 (9.09)		12 (15.00)
	Disagree	4 (21.05)	0 (0)	1 (5.00)	1 (4.55)		6 (7.50)
		n=19(23.75)	n=19(23.75)	n=20(25)	n=22(27.5)		n=80
Whatever feedback comes too late to be useful	Agree	11 (57.89)	9 (47.37)	9 (45.00)	9 (40.91)	p = 0.464	38 (47.50)
	Neutral	2 (10.53)	5 (26.32)	9 (45.00)	9 (40.91)		25 (31.25)
	Disagree	6 (31.58)	5 (26.32)	2 (10.00)	4 (18.18)		17 (21.25)

The students' experiences in terms of quality of feedback: All of p-values were above p>0.05, except of the question of that feedback mainly told them how well they are doing in relation to others (p = 0.015) which indicated significant difference between years (Table IV). Majority of the students in

2nd year feedback mainly does not tells them how they are doing in relation to others (84.21%; n=16). Both 3rd (55% n= 11) and 4th (36.36% n=8) years are neutral and equal to the amount that disagree about how feedback mainly tells them how they are doing.

Majority of the students of across all years did agree that once received and read feedback can understand why they got the mark they did and can seldomly see from the feedback what they needed to do to improve (47.5%; n=38). (Table IV).

Table IV: The students' experiences in terms of quality of feedback

Quality of feedback		1st year n (%)	2nd year n (%)	3rd year n (%)	4th year n (%)	p-value	Overall n (%) 80 (100)
		n=18(22.5)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=79**
Feedback mainly tells how one is doing in relation to others	Agree	8 (44.44)	2 (10.53)	5 (25.00)	6 (27.27)	p = 0.011*	21 (26.58)
	Neutral	3 (16.67)	1 (5.26)	11 (55.00)	8 (36.36)		23 (29.11)
	Disagree	7 (38.89)	16 (84.21)	4 (20.00)	8 (36.36)		35 (44.30)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Feedback helps one understand things better	Agree	13 (68.42)	13 (68.42)	13 (65.00)	14 (63.64)	p = 0.624	53 (66.25)
	Neutral	5 (26.32)	2 (10.53)	6 (30.00)	6 (27.27)		19 (23.75)
	Disagree	1 (5.26)	4 (21.05)	1 (5.00)	2 (9.09)		8 (10.00)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Once feedback shows one how to do better next time	Agree	15 (78.95)	13 (68.42)	12 (60.00)	15 (68.18)	p = 0.183	55 (68.75)
	Neutral	4 (21.05)	1 (5.26)	6 (30.00)	5 (22.73)		16 (20.00)
	Disagree	0 (0)	5 (26.32)	2 (10.00)	2 (9.09)		9 (11.25)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Once read feedback one understands the marks they receive	Agree	13 (68.42)	11 (57.89)	5 (25.00)	9 (40.91)	p = 0.110	38 (47.5)
	Neutral	4 (21.05)	4 (21.05)	13 (65.00)	11 (50.00)		32 (40.00)
	Disagree	2 (10.53)	4 (21.05)	2 (10.00)	2 (9.09)		10 (12.5)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
One doesn't understand some of the feedback	Agree	8 (42.11)	12 (63.16)	7 (35.00)	11 (50.00)	p = 0.343	38 (47.5)
	Neutral	6 (31.58)	4 (21.05)	9 (45.00)	8 (36.36)		27 (33.75)
	Disagree	5 (25.32)	3 (15.79)	4 (20.00)	3 (13.64)		15 (18.75)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
One can seldom see from the feedback what one needs to	Agree	10 (52.63)	8 (42.11)	8 (40.00)	12 (54.55)	p = 0.810	38 (47.5)
	Neutral	3 (15.79)	7 (36.84)	8 (40.00)	6 (27.27)		24 (30.00)
	Disagree	6 (31.58)	4 (21.05)	4 (20.00)	4 (18.18)		18 (22.50)

do to improve							

Utilisation of feedback from online assessments given to UKZN Occupational Therapy students: All of p-values were above p>0.05 indicating no significant difference between years (Table V), Majority of the students across the years found that once they read the feedback carefully, and tried to understand what the feedback was saying they could work on improving (80%; n=64). More than half of students across all years reported that they used the feedback to go back over what they had done in the assignments (63.75%, n=51), and more than half of students from across all years did use the feedback for revising (56.25%; n=45).

Table V: Utilisation of feedback from online assessments given to UKZN Occupational Therapy students'

What you do with the feedback		**1st year n (%)**	**2nd year n (%)**	**3rd year n (%)**	**4th year n (%)**	**p-value**	**Overall n (%) 80 (100)**
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Reads the feedback carefully and try to understand what the feedback says	Agree	14 (73.68)	17 (89.47)	14 (70.00)	19 (86.36)	p = 0.371	64 (80.00)
	Neutral	5 (26.32)	2 (10.53)	4 (20.00)	3 (13.64)		14 (17.50)
	Disagree	0 (0)	0 (0)	2 (10.00)	0 (0)		2 (2.50)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
One use feedback to go back over what was done in the assignment	Agree	11 (57.89)	15 (78.95)	10 (50.00)	15 (68.18)	p = 0.236	51 (63.75)
	Neutral	5 (26.32)	0 (0)	8 (40.00)	4 (18.18)		17 (21.25)
	Disagree	3 (15.79)	4 (21.05)	2 (10.00)	3 (13.64)		12 (15.00)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
The feedback does not help with any subsequent assignments	Agree	3 (15.79)	3 (15.79)	4 (20.00)	6 (27.27)	p = 0.416	16 (20.00)
	Neutral	8 (42.11)	5 (26.32)	10 (50.00)	11 (50.00)		34 (42.50)
	Disagree	8 (42.11)	11 (57.89)	6 (30.00)	5 (22.73)		30 (37.50)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
The feedback prompts to go back over material covered earlier in the course	Agree	10 (52.63)	11 (57.89)	6 (30.00)	12 (54.55)	p = 0.401	39 (48.75)
	Neutral	4 (21.05)	4 (21.05)	5 (25.00)	4 (18.18)		17 (21.25)
	Disagree	5 (26.32)	4 (21.05)	9 (45.00)	6 (27.27)		24 (30.00)
		n=19(23.75)	**n=18(22.5)**	**n=20(25)**	**n=22(27.5)**		**n=79**
One doesn't use the feedback for revising	Agree	4 (21.05)	3 (16.67)	3 (15.00)	4 (18.18)	p = 0.140	14 (17.72)
	Neutral	4 (21.05)	2 (11.11)	10 (50.00)	4 (18.18)		20 (25.32)
	Disagree	11 (57.89)	13 (72.22)	7 (35.00)	14 (63.64)		45 (56.96)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**

One tends to read for marks	Agree	8 (42.11)	7 (36.84)	5 (25.00)	5 (22.73)	P= 0.554	25 (31.25)
	Neutral	3 (15.79)	1 (5.26)	8 (40.00)	6 (27.27)		18 (22.50)
	Disagree	8 (42.11)	11 (57.89)	7 (35.00)	11 (50.00)		37 (46.25)

Occupational Therapy students' experiences with examination and online learning across from across all years during COVID: All of p-values were above p>0.05, except of that students forget most of the learning after the exam n=51; 63.75%, (p = 0.019) indicating a significant difference between years (Table VI). Majority of the students in 1st, 2nd and 4th year reported that they probably forgot all the learning after the exam (47.37% n=9); 52.63% n=10 and 54.55% n=12 respectively). Half of the students in 3rd year reported that they are in neutral (50% n=10).

Majority of the students of across all years did agree that they found to learn new things while preparing for the exam (63.75% n=51) but more than half agreed that in the exam you cannot get away with not understanding and still get good marks (51.25%; n=41)(Table VI).

Table VI: Occupational Therapy students' experiences with examination and online learning across all years during COVID-19

The Examination and learning		**1st year n (%)**	**2nd year n (%)**	**3rd year n (%)**	**4th year n (%)**	**p-value**	**Overall n (%) 80 (100)**
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Preparing for the exam was mainly a matter of memorising	Agree	6 (31.58)	9 (47.37)	3 (15.00)	6 (27.27)	p = 0.394	24 (30.00)
	Neutral	4 (21.05)	3 (15.79)	7 (35.00)	5 (22.73)		19 (23.75)
	Disagree	9 (47.37)	7 (36.84)	10 (50.00)	11 (50.00)		37 (46.25)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Doing the exam brought things together	Agree	12 (63.16)	4 (21.05)	4 (20.00)	10 (45.45)	p = 0.100	30 (37.50)
	Neutral	5 (26.32)	10 (52.63)	9 (45.00)	5 (22.73)		29 (36.25)
	Disagree	2 (10.53)	5 (26.32)	7 (35.00)	7 (31.82)		21 (26.25)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Learnt new things while preparing for the exam	Agree	15 (78.95)	15 (78.95)	5 (25.00)	16 (72.73)	p = 0.019*	51 (63.75)
	Neutral	4 (21.05)	1 (5.26)	10 (50.00)	3 (13.64)		18 (22.50)
	Disagree	0 (0)	3 (15.79)	5 (25.00)	3 (13.64)		11 (13.75)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Understanding things better as a result of the exam	Agree	13 (68.42)	11 (57.89)	6 (30.00)	9 (40.91)	p = 0.174	39 (48.75)
	Neutral	2 (10.53)	5 (26.32)	10 (50.00)	8 (36.36)		25 (31.25)
	Disagree	4 (21.05)	3 (15.79)	4 (20.00)	5 (22.73)		16 (20.00)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
Probably forget most of it after the exam	Agree	9 (47.37)	10 (52.63)	4 (20.00)	12 (54.55)	p = 0.025	35 (43.75)

	Neutral	6 (31.58)	3 (15.79)	10 (50.00)	5 (22.73)		24 (30.00)
	Disagree	4 (21.05)	6 (31.58)	6 (30.00)	5 (22.73)		21 (26.25)
		n=19(23.75)	**n=19(23.75)**	**n=20(25)**	**n=22(27.5)**		**n=80**
In the exam can get away with not understanding and still get good marks	Agree	4 (21.05)	4 (21.05)	4 (20.00)	4 (18.18)	p = 0.779	16 (20.00)
	Neutral	5 (26.32)	5 (26.32)	8 (40.00)	5 (22.73)		23 (28.75)
	Disagree	10 (52.63)	10 (52.63)	8 (40.00)	13 (59.09)		41 (51.25)

*p<0.05 indicates a significant difference

DISCUSSION

This study provided insight into the University of KwaZulu-Natal Occupational Therapy student's experiences with online assessments during the COVID-19 pandemic in South Africa. The study identified that majority of student's had access to internet and resources such as operational laptop's and smartphones, which facilitated the engagement with online learning. This was due to UKZN and NSFAS counteracting student issues through the provision IT support for laptops[29].

The first aspect that this study focused on was the experiences of students in terms of their distribution of time and effort to their studies which varied according to the years of study. The findings revealed that students felt that study time and effort are allocated narrowly to assessed topics and that in order to do well in the degree, regular studying is required. It was concluded by a previous study, that to ensure that students are learning effectively, remote teaching needs students to complete more assignments than traditional courses. Additionally, assignments may aid students in the making up for a lack of one-on-one time with lecturers[18].

The study also identified the experiences of students' pertaining to assignments and online learning. Majority of students across all years experienced assignments as very challenging and that tackling assignments made them really think. They reported that they learn more from doing assignments than studying the actual course material, and that they cannot get good marks without understanding the work content. Overall, it was revealed that OT students had a positive experience with online assessment. The above results are reinforced by a study which revealed that online learning promoted self-learning, where the student takes an active role in the learning process[30]. More importantly, students acquired new experiences while learning, particularly self-discipline and time management[30].

With regards to quantity and timing of feedback, the findings revealed that majority of students did not feel that they received feedback fast enough through online assessments. This then impacted their learning as they reported that when they did receive feedback, it was useful and enabled them to understand why they got the mark which they were allocated. This enabled them to learn from the feedback. These statements were true across all the years of study which indicates that the

quality and timing of feedback being given throughout the degree is not sufficient enough and needs improvement. A study shows that students have used teacher feedback as a way to gauge their progress and by using the lecturers' input, students can also assess their own internal growth[31]. Additionally, lecturers are typically more successful in identifying errors in students' work as opposed to students finding errors in their own hence why lecturers giving accurate and timely feedback is crucial in ensuring student learning[31].

Once received, students perceived the quality of feedback to be very informative with regards to understanding concepts better and allowing them to see how to improve in the future. Understanding the feedback also helped students understand why they achieved the mark which they did which then further contributes to their learning process. A research study found that giving students marks along with feedback and discussion on their answers provided the most efficient guidance for effective learning to take place[32]. Students also indicated that they did not understand some of the feedback which they received which then impacted the quality of their online learning experience as a whole. This indicated that feedback is useful but not always comprehensible by students. Majority of second years indicated that feedback does not mainly indicate how they doing in relation to others whereas majority of third years remained neutral and fourth years equally disagreed and remained neutral. This shows that as the years of study progress, there is a shift regarding how students perceive feedback they receive. At the senior years of study (year three and four) feedback should especially be used by students to improve their own performance which does not appear to be the case, as many use it as a means of comparison to other peers. There is evidence that giving written feedback with explanations is more effective than giving marks[32]. This indicates that lecturers should place more emphasis on providing students with written feedback which includes explanations on how to improve moving forward as opposed to just giving students their marks without much direction on how to improve for future. A study found that students performed much better on tests when given feedback in the form of brief written remarks rather than grades alone and that feedback does boost engagement, however if the feedback is not effective, then it has no bearing on performance[32].

Majority of the students had a positive perception with regards to the use of feedback given from online assessments. According to the findings of the study, students across different years reported that upon reading the feedback carefully and trying to understand it, it assisted in allowing the students to go back over what they have done in the assignments, for revision purposes and exams. because upon reading and understanding the feedback, students found it useful and they were therefore more interactive with the feedback and it therefore assisted them more with regards to their assignments and exams. This collated with a study done by Daniel and team on examining students' feedback engagement and assessment experiences which emphasised that feedback needed to be perceived as useful by students in order for students to interact and use the feedback

given[33].This emphasises the significance of the assertions of Ndaba and colleagues that feedback during the learning process is crucial, and feedback should serve the objective of increasing learning[9]. This was seen on the study as the more the feedback was detailed and understandable, the students therefore used that feedback to enhance their learning

More than half of the students across all years had a positive experience with examinations and online learning; it allowed them to study more and learn new topics while preparing for the exam; assessments also functioned as a factor that brought things together for their understanding. This correlates with studies done [30, 34] that reflected that examinations and online learning offer learners the ability to access online materials around the clock. Moreover, it also encouraged self-learning, where students also play a role in the process of learning. This could be the outcome of a variety of factors, some of which include: having access to voice recorded PowerPoints and tutorials which they could revisit any time for revision and exam, the university working with NSFAS to ensure that students have access to data, laptops and every students getting an opportunity to participate in the discussion without the fear of excessive attention or confrontation and to engage in the lessons from the comfort of their own environments[16]. More factors included that support was also provided to guarantee that no student fell behind. Staff at higher educational institutions were encouraged to conduct tutorials.

Students were also urged to interact with academic professionals if they required further assistance to clarifying theoretical subject, this is also a positive factor that resulted in the students having a positive experience[9].

CONCLUSIONS

The COVID-19 pandemic has rapidly changed the way that teaching, learning, and assessment are carried out. It had brought a global crisis in higher education as students were required to rapidly transition from face-to-face teaching, learning and assessments to online. This study describes how the UKZN Occupational Therapy student's experienced online assessments during the COVID-19 pandemic in South Africa. The findings reveal that students had a positive experience of online assessments, however the transition provide more difficult. Most students across all years' experience assessments as challenging as it made them think critically which allows for improved learning. Students report that they learn more from doing assessments than studying the actual course material which also ensures better learning and the need for feedback helps students understand the course and where they can improve, therefore emphasis is put on receiving

feedback in time. It is therefore recommended for lecturers to take the above factors into account such as the difficulty of assessments, the number of assessments, timely feedback of assessments and quality of assessments to ensure for an effective and valuable online learning process for students.

DATA AVAILABILITY

All data derived from this study is presented in this manuscript.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest with regards to the publication of this article.

LIMITATIONS OF THE STUDY

The lack of clarity and specificity in the AEQ were said to negatively influence the validity of the AEQ, with some items in the questionnaire being open to misinterpretation by being quite vague, making it difficult for respondents to answer accurately[25]. There were limitations to the sample size as there are a number of other researchers conducting their own studies therefore a number of questionnaires are circulating in emails and WhatsApp groups which affected voluntary participation. The study has focused on Occupational Therapy students from one university therefore findings are contextually relevant to one faculty.

References

1. Govender P, Naidoo D, Van Wyk, JM. A 3Ts (teaching in troubled times) response to COVID-19 in South Africa. The Clinical Teacher. 2020; 17(4): 427-429. doi: https://doi.org/10.1111/tct.13213
2. Gurayah T. Practice Learning for Occupational Therapy in a Time of the Global COVID 19 Pandemic. International Journal of Practice-based Learning in Health and Social Care. 2021; 9(2): 82-84. doi: https://doi.org/10.18552/ijpblhsc.v9i2.728
3. Songca SP. Teaching and Learning Catch-up Plan during the COVID-19 related restrictions. 2020 [accessed 2021 November 15]. Doi:
4. Mukhtar K, Javed K, Arooj M, Sethi A. Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era. Pakistan Journal of Medical Sciences. 2020; 36. doi: https://doi.org/10.12669/pjms.36.COVID19-S4.2785
5. Singh M. The Advantages and Disadvantages of an Online Examination System. 2018 [accessed 2021 September 26]. https://blog.mettl.com/advantages-disadvantages-online-examination/
6. Vithal R. Policies on Assessment. UKZN Research Office: Policies & Procedures. 2021.[Accessed September 2021] http://research.ukzn.ac.za/PoliciesProcedures.aspx
7. University of KwaZulu-Natal. Principles of the Teaching and Learning Project Plan during the COVID-19 related restrictions for students and for academic staff. 2021. [Accessed 2021 September] http://research.ukzn.ac.za/PoliciesProcedures.aspx
8. Mandasari B. [PDF] the impact of online learning toward students' academic performance on Business Correspondence Course: Semantic scholar [Internet]. undefined. 1970 [accessed 12 October 2022]. doi: https://doi.org/10.29062/EDU.V4I1.74
9. Ndaba N, Mafuleka S, Naidoo D & Govender P. Occupational Therapy Educational Programmes' Response to the COVID-19 pandemic in South Africa: The National Perspective (in review). 2020 [accessed 12 September 2022].
10. Knowly. Advantages and disadvantages of online examination system. Online Exam Builder. 2020. [Accessed September 26, 2021] https://www.onlineexambuilder.com/knowledge-center/exam-knowledge-center/advantagesand-disadvantages-of-online-examination-system/item10240

11. Khan S, Khan RA. Online assessments: Exploring perspectives of university students. [Internet]. Education and Information Technologies. Springer. Nature. 2018 [cited 11 October 2022]. doi: http://dx.doi.org/10.1007/s10639-018-9797-0

12. Black P , William D. (2009). Developing the theory of formative assessment. Educational assessment evaluation and accountability. J Personnel Evalulation Education 21(1):5–31. https://doi.org/10.1007/s11092-008-9068-5

13. Jefferson F. A Comparative Analysis of Student Performance in an Online vs. Face-to-Face Environmental Science Course From 2009 to 2016 ;2009.

doi:https://www.frontiersin.org/articles/10.3389/fcomp.2019.00007/full

14. Robles MM, Braathen, SJ. Online Assessment Techniques. The Delta Pi Epsilon Journal. 2022. 44, 39-49.

15. Baczek M , Zaganczyk-Baczek M , Szpringer M , Jaroszynski A , Wozakowska-Kapłon B. Students' perception of online learning during the COVID-19 pandemic: a survey study of Polish medical students. Medicine. 2021 ;100:7(e24821). doi: 10.1097/MD.0000000000024821

16. Vithal R. Principles of the Teaching and Learning Project Plan during the COVID-19-related restrictions for students and for academic staff ;2016. https://ulop.ukzn.ac.za/wp-content/uploads/2022/08/Principles-of-emergency-online-teaching-new.pdf

17. Vithal R .Policies on Assessment. UKZN Research Office: Policies & Procedures. 2021.

doi:http://research.ukzn.ac.za/PoliciesProcedures.aspx

18. Almahasees Z, Mohsen K, Amin MO. Faculty's and students' perceptions of online learning during COVID-19 Frontiers. Frontiers ,2021.

doi:https://doi.org/10.3389/fcomp.2019.00007

19. Lizzio A , Wilson, K. Feedback on assessment: students' perceptions of quality and effectiveness, Assessment & Evaluation in Higher Education, 2008, 263-275.doi: https://doi.org/10.1080/02602930701292548

20. Spivey MF, Mcmillan JJ.Classroom versus online assessment. Journal of Education for Businesm ,2014 ,89: 450–456.

doi:https://doi.org/10.1080/08832323.2014.937676.

21. Gibbs G, Simpson C. Conditions Under Which Assessment Supports Students' Learning." Learning and Teaching in Higher Education ,2004,1: 3–29

22. Dawson P, Henderson M, Mahoney P, Phillips M, Ryan T, Boud D, Molloy E. What Makes for Effective Feedback: Staff and Student Perspectives." Assessment & Evaluation in Higher Education ,2019 :44 (1): 25–36.

doi:10.1080/ 02602938.2018.1467877

23. Jessop T, Maleckar B. The Influence of Disciplinary Assessment Patterns on Student Learning: A Comparative Study. Studies in Higher Education. 2016; 41(4): 696-711.doi: https://doi.org/10.1080/03075079.2014.943170

24. Batten J , Batey J, Shafe, L, Gubby, L, Birch, PDJ. The influence of reputation information on the assessment of undergraduate student work. Assessment & Evaluation. 2013; 38(4): 1-19 doi: https://doi.org/10.1080/02602938.2011.640928

25. DJS Research. Qualitative and Quantitative Research Methods. 2021. https://www.djsresearch.co.uk/glossary/item/Qualitative-and-Quantitative-Research-Methods [accessed 2021 November].

26. Patton, MQ. Qualitative research and evaluation methods. 2002. [accessed 2021 November].https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4012002/#:~:text=As%20Patton%20%282002%2C%20p.%20240%29%20explains%2C%20%E2%80%9Cthe%20purpose,homogeneous%20sample.%E2%80%9D%20Challenges%20to%20use%20of%20purposeful%20sampling

27. Gibbs, GR, Simpson, C. Measuring the response of students to assessment: The Assessment Experience Questionnaire. 2003; [accessed 2021 November]. https://www.researchgate.net/publication/228602826_Improving_student_learning_through_changing_assessment-a_conceptual_and_practical_framework

28. Marsh, HW, Morin, AJS, Parker, PD, Kaur, G. Exploratory Structural Equation Modeling. An Integration of the Best Features of Exploratory and Confirmatory Factor Analysis. 2014; 55(1) doi: https://doi.org/10.1146/annurev-clinpsy-032813-153700

29. 09 June 2020 (Notice@ukzn.ac.za) University of KwaZulu- Natal.

30. Gautam, P. Advantages and Disadvantages of Online Learning eLearningIndustry. 2020 [Accessed 2022 October 14] https://elearningindustry.com/advantages-anddisadvantagesonline-learning

31. Al-Bashir M, Kabir R, Rahman I. The Value and Effectiveness of Feedback in Improving Students Learning and Professionalising Teaching in Higher Education. Journal of Education and Practice. 2016; 7(16) 38-41. doi; https://eric.ed.gov/?id=EJ1105282

32. Hendry G, Bromberger N, Armstrong S. Constructive guidance and feedback for learning the usefulness of exemplars, marking sheets and different types of feedback in a first year law subject. Assessment & Evaluation in Higher Education.2009; doi: https://doi.org/10.1080/02602930903128904

33. Kim-Daniel Vattøy, Siv M. Gamlem, Wenke Mork Rogne. Examining students feedback engagement and assessment experiences: a mixed study, Studies in Higher Education. 2020; doi: https://doi.org/10.1080/03075079.2020.1723523

34. Adedoyin, OB, Soykan, E. “Covid-19 pandemic and online learning: the challenges and opportunities”. 2020; doi: https://psycnet.apa.org/doi/10.1080/10494820.2020.1813180

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