Issues in Social and Environmental Accounting: 2460-6081
Special Issue Volume 2, pp 72-84
DOI: 10.7176/ISEA/S2-05

Sources of Interactive Qualitative Analysis Affinity Pair Relationship *Explanations* During COVID-19

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Abstract
This study investigates the implementation of the methodology, Interactive Qualitative Analysis (IQA) to understand how non-major accounting students learn Accounting 101 in a threshold concepts-inspired tutorial programme. Even though IQA is a predominantly qualitative method, it incorporates quantitative data with qualitative data systematically. These data collection and data analysis procedures are a means of aiding participants in a focus group to describe their experiences with a phenomenon, to name these experiences and to then describe the relationships between these named experiences. The objective of the IQA methodology is to create a picture, a Systems Influence Diagram (SID), representative of the mind map of the focus group participants, with regard to the phenomenon outlined in the issue statements. A summary of theoretical codes used to capture the relationships between affinities named, an Inter Relationship Diagram (IRD), is used to draw the SID. This study describes how the IQA methodology was implemented using an online platform, during the COVID-19 pandemic, to collect data regarding the *explanations* of each affinity pair relationship identified.

Keywords: Non-major accounting students, Interactive Qualitative Analysis, Affinity Pair Relationships, Explanations, Systems Influence Diagram, Threshold Concepts Tutorial Programme

1. Introduction

Accounting 101 classrooms at universities in South Africa typically consist of large class numbers with both major and non-major accounting students. The students who are majoring in the discipline of accounting have elected to study accounting and qualify as chartered accountants or a similar profession. The students who are not majoring in the discipline of accounting have had accounting imposed upon them as a compulsory discipline in their chosen programmes. Historically the pass rates and class averages in these classes are low both internationally (Hove et al., 2010; McGee et al., 2004) and in South Africa (Du Plessis et al., 2005).

This low pass rate may be attributed to these non-major students, as well as those students who possessed an aversion to the discipline. This further necessitated the utilisation of possible innovative methods in order to assist students who do not wish to specialise in accounting in a South African context. The purpose of this study was to utilise a possible innovative method, a tutorial programme based on the Threshold Concepts Theory, to investigate the ways in which non-major accounting students experienced the learning of Accounting 101. This experience of learning was elaborated on by the participants, when they explained each affinity pair relationship identified, relevant to the chosen methodology, Interactive Qualitative Analysis (IQA). The purpose of this paper is to describe the three sources this study used in order to collect data regarding the explanation of each affinity pair relationship identified by the focus group participants.

2. Interactive Qualitative Analysis (IQA): Overview

The IQA methodology is conducted in two phases in order to generate data: the first via a focus group session and the second by means of semi-structured interviews. The bricolage metaphor described by Denzin and Lincoln in 2000, cautioned qualitative researchers against focusing on the detailed stitching of the individual patches, being affinities, and insisted rather that researchers focused on stitching the relationships between affinities, the individual patches together, to make an entire quilt with perhaps not as much detail. The objective of the IQA research study was to facilitate a focus group to create their own quilt and then to have each participant in the focus group create a separate quilt (Northcutt & McCoy, 2004, p. 43). Both phases are platforms that provide explanations for the affinity pair relationships identified and validated. The research methodology, Interactive Qualitative Analysis (IQA), was guided by the purpose of a case study, to gain an understanding of the phenomenon (Rule & John, 2011, p. 105), and it requires students to provide written feedback in order to deepen this understanding.

2.1 Brainstorming the Rudiments of Meaning

The purpose of the brainstorming session as a focus group in the face-to-face environment was to generate the maximum number of individual ideas by writing down as many issue statements to the questions asked by the facilitator on the index cards provided for a period of approximately 10 minutes. This process of privacy had its advantages and limitations (Northcutt & McCoy, 2004, p. 91).

Instead of conducting this brainstorming session at the commencement of the focus group session, a document was sent via a WhatsApp Messenger group chat, to the participants a few days before, with questions regarding the participants' learning journey. The participants were then requested to individually generate approximately twenty issue statements as responses to these questions and to then return these so that the responses of the group could be collated. This process was similar to the silent brainstorming session as it was conducted by the individual participant as it also had the advantage of reducing group pressure to respond like the other participants but allowed for the authenticity of the participant reflections. It also provided introverted participants with the full time to generate responses that they may have otherwise been afraid to vocalise (Northcutt & McCoy, 2004, p. 92). Participants had the opportunity to message me, as the facilitator, privately if they needed clarity regarding the questions sent. They also had the added advantage of having a few days to complete the issue statement generation and could therefore add more ideas, even if it was a day or so later. Some of the limitations of the silent brainstorming process were that some of the extroverted participants may have felt overwhelmed as they were better at articulating their thoughts out loud. Other participants may have felt helpless or alone when commencing with the brainstorming process as they may have required conversation prompts from other participants in order to assist them (Northcutt & McCoy, 2004, p. 92). However, this limitation was of no consequence as participants felt free to ask me via private messaging if they were unsure of anything. This process therefore eliminated the need for the index cards and pens used in the face-to-face environment.

2.2 Inductive Coding

The receipt of the participants' issue statements via WhatsApp Messenger indicated the completion of the silent brainstorming process. Each participant had listed their issue statements with the corresponding questions sent. All the issue statements were then collated per question and the collated document was sent to the WhatsApp Messenger group chat in preparation for the group activities for the day. The focus group session started at 2pm on a Sunday, the agreed upon time and day of the participants. The participants indicated that Sunday, after Church and

lunch, was an ideal time as they were available and rested and would be using their ample weekend cellular telephone data. Fourteen participants of the twenty attended. The outstanding six participants were privately messaged to remind them to attend the focus group session. After sending the collated document to the focus group, the focus group was sent the following instructions (see Table 1) for the day:

Table 1: Group Activity Instructions

GROUP ACTIVITY INSTRUCTIONS

1. Group the issue statements.
   - You may group the issue statements into similar themes.
   - You may use each question as a theme.
   - You may subcategorise each theme into more than one theme.
2. Name each theme.
3. Analyse the relationship between each pair of themes (→, ←, —)
   - I have drawn up tables for you to complete.

   EXAMPLES

1	→	2	Theme 1 influences theme 2
3	←	4	Theme 4 influences theme 3
5	—	6	No relationship between themes

The first group activity for the focus group participants to complete, was to review the collated issue statements document and to then group the issue statements into similar themes or affinities (Northcutt & McCoy, 2004, p. 98). As all the participants listed their issue statements per question, they were presented with two methods of grouping the issue statements before being asked if they identified any subcategories. The first method participants were presented with was the option to group the issue statements into similar themes. The second method participants were presented with was the option to use each question as a theme. In the face-to-face environment, the participants were asked to silently review the index cards that they taped onto the wall and to then group these index cards into similar themes. The participants elected to use the second method as each participant had already listed their issue statements per corresponding question asked. The focus group indicated that they did not identify any subcategories per theme. The word 'theme', and not 'affinity', was consistently used with the focus group as this was a familiar word to them all. For the purposes of this study, the word 'affinity' was used where relevant going forward. This first group activity eliminated the need for the index cards, sticky tape, wall space, tape recorder, tapes and batteries, used in the face-to-face environment as all activities were recorded on the WhatsApp Messenger group chat.
Thereafter, the focus group was directed to the second group activity for the day, that of naming each theme. The participants started by reading the first question and participants, at random, started to suggest possible names for each affinity. As the facilitator, I assisted the focus group to name each affinity accordingly. The term used to describe this process of categorising the issue statements into different affinities, was that of 'inductive coding'.

2.3 Axial Coding

The next type of coding that occurred was that of axial coding. This type of coding oscillated from inductive coding to deductive coding as opposed to the exclusive nature of inductive coding. The axial coding process named and refined the affinities created (Northcutt & McCoy, 2004, p. 98). As the participants had different names for each affinity, I had to facilitate the naming as well as the refining of the allocated name especially if participants did not agree or needed more clarity.

2.3 Affinity Descriptions

Once the affinities had been named and all participants had reached consensus, I had to then write a detailed explanation of each affinity identified, using the data collected (Northcutt & McCoy, 2004, p. 100).

3. Source One: Interactive Qualitative Analysis (IQA): Phase One: Theoretical Coding: Adapted Simple ART

The objective of the IQA methodology is to create a picture, a Systems Influence Diagram (SID), representative of the mind map of the focus group participants with regard to the phenomenon outlined in the issue statements. The study elected to use the group reality and not the individual reality to create a mind map of the participants. A summary of theoretical codes used to capture the influences between affinities and an Inter Relationship Diagram (IRD), was used to draw the SID. The design of the IQA study involved accounting for three theoretical coding issues as follows: firstly, how much detail was required for each relationship; secondly, how the focus group was arranged for analysis of each relationship; and thirdly, how a group system was created (Northcutt & McCoy, 2004, p. 149).

3.1 Theoretical Coding Issue 1: Level of Detail

The participants were encouraged to provide examples from their experience for each affinity relationship that they identified. The Simple ART is the "quick and dirty" means of conducting theoretical coding and is used if time was a limitation. The Simple ART will record each relationship pair direction without the explanation required in the form of examples (Northcutt & McCoy, 2004, p. 150). In a face-to-face environment participants would have been provided with pre-printed documents and tables at the focus group session (Northcutt & McCoy, 2004, p. 88) regardless of the type of ART elected for creating the group composite.

As time, as well as the logistics and the administration of the newly-designed online platform was an issue, the study implemented an adaptation of the Simple ART during the focus group session. Even though the authors were of the view that in order to generate the richest study, a researcher needed to complete the entire IQA process, it would however be naïve to assume that all researchers and participants will have the adequate time and means to do so (Northcutt & McCoy, 2004, p. 166). The third group activity for the focus group participants to complete, being the focus of this paper, was to analyse the relationship between each pair of themes identified. Tables were drawn up for the focus group to complete. The group activity instructions also explained that arrows and dashes needed to be used in order to complete these tables and a set of examples describing what the forward arrow, backward arrow and dash meant in relation to the themes identified. The focus group participants were provided with eight tables, as eight affinities were generated, to complete the analysis of the relationship between each affinity pair relationship identified.

3.2 Theoretical Coding Issue 2: Organising the Focus Group

The second issue was how the focus group was to be arranged for the analysis of each relationship. If fifteen participants comprised the focus group, and each participant was requested to complete an ART this meant that there will be fifteen different sets of codes. If this fifteen-participant group was subdivided into five groups of three participants, then this meant that there will be five different set of codes (Northcutt & McCoy, 2004, p. 154). Individual Detailed ARTs are deemed to be effective because they are a continuation of the silent brainstorming process initially conducted. The use of democracy, using the majority vote to capture the voice of the group as a whole, is another option. In intense circumstances, participants do not investigate the affinity relationships, but rather had an analysis that was

conducted retrospectively (Northcutt & McCoy, 2004, p. 156).
For the Simple ART in the face-to-face environment, the facilitator recorded the analysis of the affinity pair relationships by the majority show of hands (Northcutt & McCoy, 2004, p. 156). The ARTs may be completed by each participant or the focus group may be organised into smaller groups, being dyads or triads, groups with two or three participants (Northcutt & McCoy, 2004, p. 156). As it would have been a challenge to administer each dyad or triad in an online platform, the study instead used the entire focus group to record the analysis of the affinity pair relationships by majority show of hands, meaning that one set of codes from fourteen participants of twenty who attended the focus group session on the day was obtained.
For the Simple ART eight tables were drawn up as there were eight affinities identified. Below is an example of the first (see Table 2) of the eight tables (see Annexure 9). This table was comprised of three columns. The first column listed only the first affinity, whilst the third column listed all the pairing options relevant to the remainder of the affinities identified. The second column was populated by the participants with either a forward arrow, backward arrow or a dash after they had analysed the relationship between each pair of affinities identified.

Table 2. Adapted Simple ART Table 1

1		**2**
1		**3**
1		**4**
1		**5**
1		**6**
1		**7**
1		**8**

Instead of strictly adhering to the face-to-face protocol for the Simple ART, its use was slightly adapted as it was implemented via WhatsApp Messenger in an online platform. Instead of asking for a show of hands per affinity relationship, the participants were instead asked to complete eight tables as a group. One table was given to the focus group at a time for them to complete. One participant was elected per table to chair the facilitation of reaching consensus with majority vote as the means. The reason this study chose participants to chair select parts of the discussion was so that all the voices of the participants would be heard instead of just a few domineering voices. Participants appeared to be keen to do this as they could see that they were taking charge of their learning. Once the first table was sent to the focus group chat, the chairperson asked the participants for their thoughts and suggestions. Some participants commenced by completing the table by themselves and sending their perspective to the focus group. These options posed to the focus group were then analysed by all participants and some participants decided to choose the table option that resonated most with them, whilst other participants provided the focus group with the amendments that they would make to a chosen table and an explanation as to why. Thereafter participants responded to these amendments and made further amendments or even added a new table with their perspective and supplementary explanations. The chairperson concluded the table allocated by using the majority vote method per affinity pair relationship based on the debates and explanations of the focus group.
Even though the online focus groups are convenient and cost-effective to the participants and facilitator, there are inherent challenges identified too. As this platform utilised instant messaging only, this meant that with the lack of a video function, the visual prompts from the participants could not be considered. Another challenge presented was the limited degree of control by the facilitator (Hinkes, 2020). Examples of the limited control that was experienced in this study was that some participants joined the focus group session either a little late, or not at all, or were inactive for brief periods. These participants had to be privately messaged to

either remind them to join or to participate a little more, meaning that not all the voices of the participants were heard equally. Researchers also have to be cognisant of the fact that participants may have used the internet to search for the answers to the questions being asked. Most of the participants did not know each other from the large classroom environment prior to the lockdown, and they used this anonymity and the absence of a video function to their advantage. This yielded in most participants actively engaging with rich responses and sometimes questions to the questions asked as they did not have the fear of being intimidated by the more interactive participants that they would have encountered if they were in a face-to-face forum (Tates et al., 2009).

The reason for using the Adapted Simple ART method with majority vote for the theoretical coding session of the IQA analysis, was because this session was the longest period that the participants would have had to interact with each other, apart from the brief inductive and axial coding sessions. In a face-to-face environment, participants would be interacting with each other from the commencement of the threshold concepts tutorial programme. The purpose of this study promoting this interaction was to provide some sort of interaction and rapport amongst the students, which would have otherwise been absent in an online platform. Another advantage that unexpectedly arose from the Adapted Simple ART method was that participants provided some explanations when justifying why they did not agree with the analysis of a particular affinity pair relationship. As the goodwill of the participants prevailed during the Individual Detailed ART session, this Adapted Simple ART theoretical coding session then also served as practice or pilot session on how to code and to explain the code decided upon. The participants had the opportunity to read their peers' explanations and by the time they started the Individual Detailed ART analysis of the affinity pairs, they had had the time to reflect upon their own responses as well as those of their peers and perhaps amend their perceptions. The explanations in this focus group session, relevant to the Individual Detailed ARTs when using the Pareto Protocol to create the group composite, were also available to use when describing the affinity pair relationships in the next chapter.

Time permitting, the facilitator can draw an IRD and SID so that the focus group participants could respond to their mind map (Northcutt & McCoy, 2004, p. 155). However, this adapted version of the Simple ART took five hours to complete as it had a little more depth with the unexpected addition of debates and some explanations for the affinity pair relationships, in comparison to merely counting hands in response to each affinity pair relationship. The participants were exhausted by the time the chairperson submitted the last table and as such the session was closed at 7pm upon receipt of the last table. Below are the eight tables generated by the focus group session.

Table 3: Adapted Simple ART Tables

ANALYSIS OF EACH PAIR OF AFFINITY RELATIONSHIPS (FOCUS GROUP)

Number	Group
1.	Learning Experiences
2.	Adopting a Holistic Approach to Learning
3.	Various Learning Outcomes
4.	Demystified Threshold Concepts Infused Materials
5.	Learning Challenges
6.	Emotional Responses
7.	Perceptions
8.	Learning Attributes

1	←	2
1	→	3

1	←	4
1	→	5
1	←	6
1	-	7
1	→	8

2	→	1
2	→	3
2	→	4
2	←	5
2	←	6
2	←	7
2	→	8

3	←	1
3	←	2
3	←	4
3	←	5
3	→	6
3	→	7
3	→	8

4	→	1
4	←	2
4	→	3
4	←	5
4	→	6
4	→	7
4	→	8

5	→	1
5	→	2
5	→	3
5	→	4
5	→	6
5	←	7
5	→	8

6	←	1
6	→	2
6	←	3
6	←	4
6	←	5
6	←	7
6	←	8

7	←	1

7	→	2
7	→	3
7	←	4
7	←	5
7	←	6
7	←	8

8	←	1
8	←	2
8	→	3
8	→	4
8	→	5
8	→	6
8	→	7

3.3 Theoretical Coding Issue 3: Creating a Group Composite

This issue dealt with how a group system will be created. The Democratic Protocol or the Pareto Protocol were the available options and the time at the researcher's disposal dictated which protocol to use. Even though this study used both protocols, for the purposes of this paper, the implementation of the Democratic Protocol will be described. The Democratic Protocol however used the democratic majority vote and should be utilised if the dominant purpose is to generate an affinity list as opposed to conducting an in-depth analysis of the focus group (Northcutt & McCoy, 2004, p. 164).

After the participants had completed the analysis of each affinity pair relationship on the eight tables, the theoretical coding session came to an end as this session took a period of five hours to complete and the participants were exhausted. As such, time did not permit me to ask the participants to review their tables to ensure that they were happy with their analysis, nor did it allow for me to draw a quick IRD and SID for the participants to respond to (Northcutt & McCoy, 2004, p. 155) based on their analysis. Therefore, the review had to be conducted and the IRD and SID had to be drawn up without the participants, after the completion of the theoretical coding session (see Annexure 11, 12, 13, 14, 15).

Table 4: Adapted Simple ART Tabular IRD

	1	2	3	4	5	6	7	8	Out ↑	In ←	Δ
1		←	↑	←	↑	↑	↑	↑	5	2	3
2	↑		↑	↑	←	←	←	↑	4	3	1
3	←	←		←	←	↑	←	←	1	6	-5
4	↑	←	↑		←	↑	↑	↑	5	2	3
5	↑	↑	↑	↑		↑	↑	↑	7	0	7
6	↑	↑	←	←	←		↑	←	3	4	-1
7	-	↑	↑		↑	↑		←	4	2	2
8	←	←	↑	↑	↑	↑	↑		5	2	3

Table 5: Adapted Simple ART Tabular IRD: Sorted in Descending Order Of Δ

	1	2	3	4	5	6	7	8	Out ↑	In ←	Δ
5	↑	↑	↑	↑		↑	↑	↑	7	0	7
1		←	↑	←	↑	↑	↑	↑	5	2	3
4	↑	←	↑		←	↑	↑	↑	5	2	3
8	←	←	↑	↑	↑	↑	↑		5	2	3
7	-	↑	↑	←	↑	↑		←	4	2	2
2	↑		↑	↑	←	←	←	↑	4	3	1
6	↑	↑	←	←	←		↑	←	3	4	-1
3	←	←		←	←	↑	←	←	1	6	-5

Figure 1: Adapted Simple ART Cluttered SID

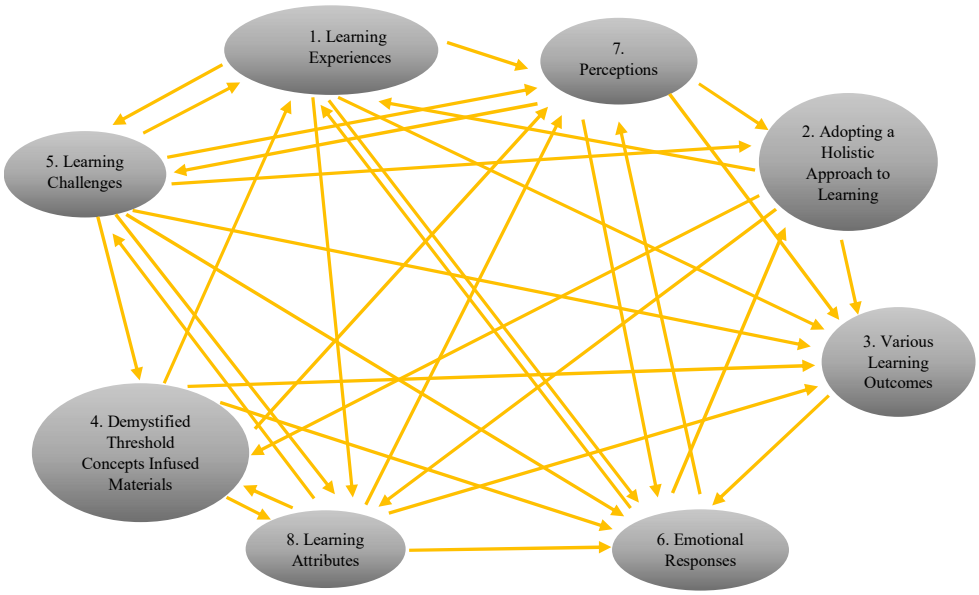

Figure 2: Adapted Simple ART Uncluttered SID

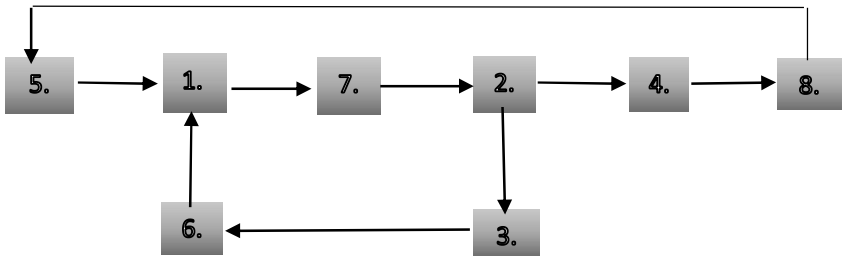

Figure 3: Adapted Simple ART Telephoto View SID

(5 – 1 – 7 – 2 – 4 – 8 – 5) – (1 – 7 – 2 – 3 – 6 – 1)

The IRD revealed seven ambiguous relationships, being affinity pair relationships that argued

for both directions. This meant that these ambiguities had to be analysed in order to determine if any mischievous topologies existed within the system. A mischievous topology implied that there has been a failure to identify a minimum of one affinity between the two identified affinities, implying that the participants identified an indirect affinity pair relationship as a direct one. This ambiguity is resolved in one of two ways. The first way to resolve ambiguous affinity pair relationships was by identifying undetected common influences and undetected feedback loops. Therefore, once these were detected, the relationship was no longer ambiguous as it will then form part of a micro system within the entire macro system. The second way to resolve ambiguous affinity pair relationships was by making use of the interview phase of the IQA process, if the researcher realised that these relationships do not possess undetected common influences or undetected feedback loops (Northcutt & McCoy, 2004, p. 163). If the Simple ART was applied strictly, then the facilitator will count the number of votes per affinity pair relationship direction in order to determine which direction had the highest frequency, with a tie being determined by analysing the interviews conducted (Northcutt & McCoy, 2004, p. 291). As the use of the Simple ART was adapted, and the number of votes were not counted, the option to utilise frequency to resolve the ambiguous relationships that arose was not available. However, all of the undetected common influences and undetected feedback loops were identified and therefore all seven relationships identified were no longer ambiguous ones. As such an overall linear view of the Adapted Simple ART was produced.

There was however no intention to use the Adapted Simple ART information to create the group composite with the use of the Pareto Protocol, as the Individual Detailed ARTs were completed and provided a more accurate reflection of all of the participants in the focus group with an explanation per affinity pair relationship. The reasons for conducting the Adapted Simple ART were explained in Theoretical Coding Issue 2: Organising the Focus Group, with the accompanying limitations experienced above.

4. Source Two: Interactive Qualitative Analysis (IQA): Phase One: Theoretical Coding: Individual Detailed ART

The implementation of the Pareto Protocol in order to generate explanations using an Individual Detailed ART has been discussed in a previous paper.

5. Source Three: Interactive Qualitative Analysis (IQA): Phase Two

5.1 Individual Reality: IQA Interview

IQA is a very rigid methodology that adhered to the rules of systematisation in a qualitative research environment. The meaning of the phenomenon was represented in terms of affinities and the relationships between these affinities. The interview is therefore directed by the affinities identified in the focus group session as a second set of data collection. The first phase of the interview is called the axial interview and this involved the researcher asking the individual participants what each affinity meant to them as well as to provide their experiences with each affinity (Northcutt & McCoy, 2004, p. 197). The second phase of the interview is called the theoretical interview and this involved the researcher asking the individual participants to provide an analysis of the relationships that they perceived to be between the affinities (Northcutt & McCoy, 2004, p. 199). This phase of the IQA process will be fully discussed a subsequent paper.

5.2 Telephonic Interviews Used During COVID-19

Qualitative research has employed the use of interviewing as the most generally accepted means of data collection (Creswell & Creswell, 2017). Traditionally this means of interviewing was conducted primarily in a face-to-face environment. This environment has inherent strengths, mainly being that the interviewer can control the environment by using personal interaction

(Holbrook et al., 2003; Szolnoki & Hoffmann, 2013). Telephonic interviews were less appealing to use in qualitative research as the visual cues that would be utilised by the interviewer when personally interacting with the participant in a face-to-face environment was absent. However, some research studies have shown that participants are relaxed and more amenable to divulging sensitive information and that there was not enough evidence to support the claim that telephonic interviews generated data of a lower quality (Novick, 2008). Prior studies have on the other hand, shown that participants have felt uncomfortable when divulging sensitive information via the telephone (Groves, 1979). Some benefits when using telephonic interviews are the lower cost and time, safety of participants, for example in high crime regions, and where prior contact has been made with the participants in small-scale qualitative studies (Carr & Worth, 2001). When designing this study using online platforms, the participants indicated that the use of WhatsApp Messenger would be the most cost-effective platform. The WhatsApp Messenger calling function was used to call participants in order to conduct the interview phase of the IQA methodology. Other studies have implemented the use of Skype for their interviews (Janghorban et al., 2014), but this option was not as cost-effective to the participants as they had cellular telephone data constraints. Some participants opted to use their night time cellular telephone data, so some of the interviews were conducted in the evening, with one participant who had requested his interview to be scheduled at midnight. As this study was conducted during a pandemic, the utilisation of a telephonic interview ensured the safety of the participants as this telephonic platform eliminated the need for face-to-face interaction. As the interview was the final part of the study, a rapport had already been established with the participants. This rapport provided a level of assurance in the absence of visual cues.

5.3 Preparing for the Interview

The researcher needed to be cognisant of the content and the logistics prior to the commencement of the interviews. It is imperative that the researcher has an in-depth understanding of the protocol established for the interview as well as each affinity identified. Even though the interview commenced with planned interview questions, the researcher needs to not only reply to the participant, but to also navigate the conversation as per the direction the participant chose to follow. The in-depth understanding of the researcher has the added benefit of allowing the researcher to intently focus on what the participant had to say as well as respond appropriately. As the interviews were conducted using the WhatsApp Messenger calling feature, this logistical set-up involved conducting an equipment check of all the devices used to conduct the interview as well as record the interview. I used my laptop to read the interview questions from and had a separate Microsoft Word document with the ART and space below to make notes on, that were projected onto the television in the room I conducted the interviews. I decided to complete the ART so as to make the process convenient for the participant. I also had a printed copy of the interview questions, ARTs and a notebook with stationery in case any laptop and television issues were encountered. I also used the Voice Recorder function on my previous cellular telephone to record the interview, as I used the loudspeaker function on my current cellular telephone to call the participants using the WhatsApp Messenger calling feature. I had tested the clarity of the conversation by recording a conversation prior to the interviews being conducted. I also had to use an HDMI cable to allow for connection from the laptop to the television, and a multiplug adapter to accommodate the charging cables of these three devices. The purpose of conducting these equipment checks and having printed backup documentation, a notebook and stationery, was to not waste time in the event of an unforeseen circumstance, but to rather interact as productively as possible with the participant (Northcutt & McCoy, 2004, p. 202).

5.4 IQA Interview To-Do's

Upon calling the participant from my cellular telephone using the WhatsApp Messenger calling feature, I commenced by creating a comfortable environment for the participant by firstly asking them general information about themselves relevant to the study. A newly planned set of general, introductory questions for the participants to answer at the beginning of the conversation before moving to the axial and theoretical sections of the interview were asked (see Annexure 17). These general, introductory questions were relevant to the newly-designed online platform used in the study: the emotional impact the lockdown had on the participants, the data, the service providers, the device used, the learning environment and their perceptions of Accounting 101 and the threshold concepts tutorial programme upon completion of the study. Once the participant felt comfortable enough to divulge this general information (Northcutt & McCoy, 2004, p. 204) and anything else they may have wanted to add about themselves, we then proceeded to the next phase of the interview as this general information promoted a better rapport with the participant.

Prior to commencing with the axial phase of the interview, a picture of a table of the eight affinities identified in the focus group session was sent to each participant. Each participant was then asked to look at each theme listed on the table and to share their experiences of each one. The word theme, and not affinity, was used throughout the interview, as I wanted to use terminology familiar to the participants. Once this phase was completed, we proceeded to the theoretical phase of the interview.

For this phase the participants were told that some of the themes generated in the focus group session have a relationship. The participants were then asked to indicate which themes they had identified as having a relationship with another theme, and to then provide an example of their learning experiences of Accounting 101 for each causal relationship that they had identified (Northcutt & McCoy, 2004, p. 204). The purpose of this follow-up interview in the IQA process, was to provide a richer portrayal of the phenomenon under review in addition to that of the focus group session conducted prior to this phase. Therefore, Phase One of the IQA process, being the focus group session, and Phase Two of the IQA process, being the interview session, were parallel in nature (Northcutt & McCoy, 2004, p. 167). It was noticed that the responses for the theoretical phase were very limited. This meant that the blank ARTs prepared for each participant were not even used, as the participants listed just a few relationships in the telephonic interview, even after being reminded about the tables that they had completed. I presumed that the goodwill of the students regarding the affinity pair relationships and explanations had been exhausted, as they had completed the Individual Detailed ARTs, and I did not want to push the participants any further. These affinity pair relationship explanations are also included in the next chapter.

6. Conclusion

This paper detailed the outcomes of the IQA methodology implemented in a newly designed online platform during the COVID-19 pandemic. Phase One of the IQA methodology created a SID, a mind map representative of the group reality regarding the phenomenon outlined in the issue statements. This phase adapted the use of the Democratic Protocol and the Simple ART. Phase Two of the IQA methodology involved conducting a two-phased interview, representative of the individual reality, that generated a second set of data in order to validate the end product of Phase One. This phase adapted the use of the traditional face-to-face interview protocol. The written reflections of the participants as a result of implementing the chosen methodology, Interactive Qualitative Analysis (IQA): the affinity descriptions, the affinity pair relationships identified, the semi-structured interviews conducted, and the reflective learning journals, provided a detailed description of the experiences of the non-major accounting students' learning of Accounting 101 in a threshold concepts tutorial programme. These descriptions yielded a holistic view of the conceptually and emotionally troublesome

experiences of the participants.

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