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Web-based research using Delphi methodology to explore the discrepancy in qualitative research

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Abstract

Purpose: The purpose of this study was to identify the key discrepancies in the qualitative research approach and its effect on research outcomes using Delphi web technique. *Methods:* An electronic questionnaire was used to collect experts' opinions over two rounds. A panel of 24 experts filled questionnaire in the first round and 17 of them continued in the second round. Answers to open-ended questions were tabulated, summarized and analyzed thematically generating 44 items. Participants then were asked to rate their level of agreement with these item statements in the second round. *Results:* Scholars used and viewed the same qualitative approaches differently with a percentage of 76.5%. The paradigm for qualitative research is not well defined with a percentage of 70.6%. Every book and every published research article seems to describe qualitative methods differently. Furthermore, schools of qualitative research defined assumptions and their purposes differently. *Conclusion:* Recently there is an increase in using qualitative research methods in nursing. For novice researchers, a qualitative approach is not always clear. The experts were from different countries with diverse experiences and reached the consensus on some topics. This survey implies that the qualitative textbooks need to be more consistent with more simplification of the ambiguous terms.

Keywords

Delphi, Qualitative Research, Discrepancy, Web-Based

1. Introduction

The past decade has witnessed a remarkable increase in using qualitative health research methods by health care researchers, and specifically by nursing researchers [1]. This growth was accompanied with moving beyond the adherence to the specific methods of phenomenology, grounded theory, and ethnography to develop methods more responsive to the interests and needs of researchers [2]. For example, in order to meet a need in nursing research to draw evidences from clinical nursing practice, the interpretive description approach was developed by Thorne and her colleagues as an

alternative for developing nursing knowledge [3]. This approach encourages researchers to work in a different way than the traditional methodological approaches, and create a design that is supposed to be consistent with the aim of each individual research study [2]. An approach such as this was not only used by nurses but has applications across disciplines that are closely linked to practice settings such as health sciences [4]. This was accompanied not only with moving away from the traditional methodological approaches, but also with confusion related to using different terms that are not consistent with the previously established qualitative methods. Thus, this presents a challenge to qualitative researchers regarding the lack of clarity of the methodology which has recently emerged, especially in the absence of explicit guidelines for determining the best way of conducting the research and maintaining the rigor in research process.

1.1. Lack of Clarity in Qualitative Research Methodology

Lack of clarity in qualitative research methodology is reported by different researchers who used the qualitative approach. The literature review on qualitative research revealed that there are many different terms used to define the research in the ways that are not consistent with the originally established qualitative approach. For example, the term 'non categorical' was used to represent the 'interpretive description' of the qualitative research approach [5, p. 169]. On the other hand, in another study which focused on research methodology provided a description of "basic or fundamental qualitative description" [6, p. 335]. Other researchers asserted that the interpretive approach can be described as a basic or generic qualitative research [7], whereas others refer to it as an exploratory research [8].

Lack of methodological clarity is considered one of the most common problems identified in qualitative research studies. Clearly, there is a confusion that may arise from using and defining the concepts inconsistently. For example, the terms methodology and method are sometimes used synonymously, while other times are used inconsistently [3]. This confusion is also emphasized by Creswell [9] who indicated that some confusion exists in qualitative research methodology between the levels of epistemology, methodology, and methods.

Confusion is also evident at the level of very important notions such as the concept of saturation during data collection. For example, researchers from different disciplines hold varied opinions on the issue of saturation and sample size in qualitative research, since there is some confusion related to different aspects of saturation such as what it means, when it is applicable, and how it should be used [10, 11].

Surprisingly, qualitative researchers themselves may wonder how their qualitative work, which used alternative epistemologies and research methodologies, is being evaluated by journals that publish their articles. For example, some researchers mentioned that they both were having difficulty in publishing their qualitative research articles, and wonder how their work, which used "alternative epistemologies and research methodologies" is being evaluated [12].

Unfortunately, it is impossible to develop quality criteria that are applicable to all qualitative approaches because the fundamental suppositions, presuppositions, and premises for each particular qualitative approach vary significantly, making it impossible to develop criteria that apply to all [13]. These varieties in qualitative research thrust some researchers to argue that qualitative research can be judged by the authors only on its "individual merits "based on the overall research report [14, 15]. Thus, this will result in increasing the confusion and subjectivity in qualitative research.

1.2. Discrepancies in Qualitative Research Books

Discrepancies and inconsistencies are also evident in qualitative research books. Not only different writers failed to adequately define research terminology and sometimes using terminology in a way that is not compatible with its original meaning, but also explicit contradictions between the major ideas are found during reviewing qualitative research books. For example, Holloway and Wheeler [3, p. 142] reported that maximum variation sampling "is not often used in qualitative research which is generally more specific", while others [9, p. 157] mentioned that "Maximum variation sampling is a popular approach in qualitative studies." Furthermore, there is an explicit lack of understanding among some researchers about the differences between method and methodology. For example, some researchers [16] asserted that participant observation is the core of all qualitative research approaches, whereas others define it merely as a data collection technique [1, 17].

1.3. Violation of Qualitative Research Assumptions

The interpretive research has underlying ontological and epistemological assumptions that are distinctive from those of the positivistic research. In addition, the interpretive research has many different roots that do not have a single unified approach. The presence of such different roots creates confusion among qualitative researchers [17].

The discrepancy between qualitative method claims (assumptions) and the actual use of the method is also evident in the literature. Unfortunately, many authors merely state that they are reporting on a qualitative study, without defining what that means in the context. This is reflected in the "basic or generic qualitative studies" which have the essential goals and characteristics of qualitative research but rather than applying the assumptions of ethnography, grounded theory, or case study, they "simply seek to discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved" [18, p. 11]. Conducting qualitative research that does not claim explicit

philosophical foundations is a widely debatable issue. For example, [5]mentioned that the interpretive description is a highly interpretive approach that requires interpretation within existing knowledge, while [6] claimed that basic or fundamental qualitative description is less interpretive and less abstract.

Qualitative researchers should be aware that qualitative approaches differ because they arise from multiple and evolving philosophical understandings of the world [19]. However, when claiming that we use a specific qualitative research methodology, we need to strictly adhere to the tools for collecting and analyzing the data that are congruent with the epistemological and ontological inferences of the approach taken [20]. Kahlke [21] reported that "mixing" elements of established qualitative research methodologies that arise from multiple philosophical underpinning can lead to contradictions between all elements of the research framework.

1.4. Suspicion in the Qualitative Research Findings

Recently, the social and health care sciences tend to move from positivistic approaches to interpretive approaches. However, this shift has not been accompanied by an equal corresponding methodological shift. This is manifested by the lack of appropriate criteria for justifying and judging the quality of research findings from interpretive approaches. One of the main criticisms for different interpretive approaches is that the lack of quality criteria for judging the interpretive approach means that this approach may have findings with poor quality [22]. As a result, many researchers have questioned the adequacy and accuracy of knowledge produced within interpretive approaches.

Discrepancies in qualitative research approaches could be critical and may lead to suspicion in the research findings. It is well known that the aim of qualitative research is knowledge development. However, when the processes of knowledge development are not framed by rigorous methods throughout the entirety of a study, the resulted knowledge has a risk of being flawed, and therefore of little use to the discipline it purports to inform [13, 24]. Based on the previous discussion, the suspicion in research methodology usually necessitates suspicion in research findings.

1.5. Rational for Using Delphi Technique

The Delphi technique is a survey method designed to structure group opinions using a series of questionnaires or 'rounds' to gather information. Rounds are repeated until the resulting data reflect census of experts on the panel [20]. According to Hsu and Sandford [23], the Delphi technique is a helpful tool to gather and analyze the needed data for fact-finding, issue exploration, or discovering what is actually known or not known about a specific topic. The Delphi technique is suitable when the research problem does not lend itself to precise analytical techniques but can benefit from subjective judgments, when the individuals needed to contribute to the examination of a broad or complex problem have no history of adequate communication and may represent diverse backgrounds with respect to experience or expertise, when the population is geographically and professionally diverse, and when there is infeasible meeting arrangement due to time and cost [24].

The purpose of our study was to identify the vital discrepancies in the interpretive research approach and its effect on research findings based on Delphi web technique. We therefore wanted to grasp professional academic opinions from experts in the field of interpretive research. We felt that identifying the key discrepancies in the interpretive research approach among researchers and its effect on research findings would benefit from this wide range of opinions. Experts were drawn from the academic spheres and included internationally recognized as doctor of philosophy degree holders from a broad range of public and private universities. Panel lists had diverse backgrounds and expertise and they were also located in different geographical areas. Thus, the Delphi technique offered an effective way to achieve our aim.

1.6. The First Delphi Round

The first round was a qualitative round asking participants to respond to four open ended questions that are helpful to a better understanding of the major themes regarding discrepancies, if present, in qualitative research methodology as evidenced in some qualitative textbooks and other resources based on the experience of each expert in this field. These questions were:

1 In your opinion, do you think that qualitative research methodology is clear among researchers who use this approach?

2 Did you find any discrepancy in research books which presented the qualitative approach? For example; in defining research terminology; if yes, please mention them.

3 Do you find any discrepancy between qualitative method claims (assumptions) and the actual use of the method?

4 Based on the answers to the second and third question, if there was anything mentioned, do you think these discrepancies are critical and may lead to suspicion in the research findings?

Initially a cover letter explaining the aim of the study with an invitation to participate in the Delphi study was sent to a panel of experts around the world from doctor of philosophy degree holders. Each expert who agreed to participate was asked to fill a questionnaire designed to elicit his or her opinion about the discrepancies in qualitative research methodologies. Twenty four experts accepted to participate and have returned a filled questionnaire in the first round. The highest number of responses (eight responses) was obtained from the United States of America, followed by Australia (six responses) and then Canada (four responses). In addition, one response was obtained from each of South Africa, United Kingdom, Saudi Arabia, Norway and Sweden.

When the responses were received, they were tabulated,

summarized, and content analyzed. This generated forty four items (16 items related to question one, 13 related to question two, 6 related to question three, and 9 related to question four), which then composed the second questionnaire in the

second Delphi round (Table 1). The reason for selection of these items was their level of significance in relation to the previously stated questions.

Table 1. *The Most Significant Items from Content Analysis of Round One Responses*

Item
The qualitative research seems like the research is fairly uniform and consistent
It is clear for experts and for those who studied more advanced level of research
It is clear for ones who took workshops and training to acquire the skills
It is not clear because of many different kinds of qualitative research
For novice qualitative researchers it is not always clear
It is not clear due to great variation between researchers and way of gathering Data
Describe the philosophical underpinnings of their approach to the phenomenon, to the research design, and the research analysis is not clear
There is no mention of how they determined "rigor" or fidelity to the phenomenon they studied which makes it not clear
It depends on different discipline
It depends on kind of qualitative research; approaches, assumptions and standards
Those who use one type/school of Phenomenology do not necessarily know or use other Methods
Deficits in the question, definition of the analytic method and conclusions are superficial
Common mistake to use the term "qualitative research". The data is the qualitative. It is more appropriate to use the term interpretive paradigm (naturalistic paradigm)
This is where many qualitative researchers experience problems
The use of the same technique may not mean the same for two different researchers
In recent years there is increasing quality in research papers using qualitative methods
Did not find any discrepancies in research books that present the qualitative approach
Never reviewed such books.
It depends on the aim of the book
Introductory texts attempt to ensure that the basic information is consistent and therefore not Ambiguous
Every book seems to describe qualitative methods differently, and every published research article that describes what was done to collect and analyze data also differs in their description of the method.
The research books often don't give the nuances according to the disciplines who use this approach e.g. Phenomonenography, ethnography.
The big discrepancy between Kathryn Charmaz and Barnie Glaser. Both do grounded theory but from a different perspective
Professions or sciences use and view the same qualitative approaches differently, like for instance social sciences and nursing or caring sciences
There may be some discrepancy between researchers
Discrepancies seem to be related to the different "research methodology"
The paradigm for qualitative is not well defined or the context.
Discrepancies in the aspect of terminology are the use of operational terminology
The researcher must stay with the definitions, terminology and process of that approach
Basic assumptions are often not addressed
Theoretical underpinnings of a method are not respected in the work
Different schools of qualitative research define assumptions and their purpose differently, but people sometimes interpret them wrongly
In qualitative method there are nuances and contexts, people, approaches and interpretations that are different
No discrepancy between qualitative method claims (assumptions) and the actual use of the method
It depends in which type of qualitative research and where and what they are publishing
Qualitative research methodology is unclear
There is always suspicion of qualitative methods
Discrepancies are critical and influence the quality of qualitative research
There is a major problem for determining quality, credibility and transferability
Do not do the following describe the philosophical underpinnings
Suspicion of the findings may be too punitive
Not necessarily discrepancies are critical and may lead to suspicion in the research findings
If there are good basic education regarding qualitative and good reviewers and mentors the possibility of this will be diminished
Qualitative research may not meet criteria of the selected method, but still may produce meaningful findings, and can produce valid, rigorous findings.

1.7. The Second Delphi Round

In the second round, the participants received a questionnaire that asked them to individually indicate their agreement or disagreement to each item obtained from the analysis of the first round. This questionnaire was administered to all of the 24 experts who participated in the first round. However, the questionnaire was returned by 17 experts, generating a response rate of 70.8% for the second round.

2. Results

The Statistical Package for Social Sciences (SPSS) version 21 [25] was utilized to obtain the frequencies and percentages of the overall responses in the second round. Table 2, 3, 4, and 5 show the frequencies and percentages for agreement, disagreement, unanswered, and uncertain response for the items related to each question.

As presented in Table 2, the highest agreement was detected in item 16 (In recent years there is increasing quality

in research papers using qualitative methods) with a percentage of 94.1%, followed by item 5 (For novice qualitative researchers it is not always clear) with a percentage of 88.2%, and followed by three items; item 2 (It is clear for experts and for those who studied more advanced level of research), item 10 (It depends on kind of qualitative research; approaches, assumptions and standards),and item 15 (The use of the same technique may not mean the same for two different researchers) with a percentage of 82.4%.

The overall agreement of question one was 60.8%.

On the contrary, the highest disagreement was detected in item 8 (There is no mention of how they determined "rigour" or fidelity to the phenomenon they studied which makes it not clear) with a percentage of 52.9%, followed by item 1 (The qualitative research seems like the research is fairly uniform and consistent) with a percentage of 47.1%. The overall disagreement of question one was 22.8%.

Table 2. *The Frequencies and Percentages of Responses to Question One*

Item	Agreed	Disagreed	Unanswered	Uncertain
The qualitative research seems like the research is fairly uniform and consistent	8(47.1%)	8(47.1%)	0	1(5.9%)
It is clear for experts and for those who studied more advanced level of research	14(82.4%)	3(17.6%)	0	0
It is clear for ones who took workshops and training to acquire the skills	11(64.7%)	4(23.5%)	2(11.8%)	0
It is not clear because of many different kinds of qualitative research	9(52.9%)	6(35.3%)	1(5.9%)	1(5.9%)
For novice qualitative researchers it is not always clear	15(88.2%)	1(5.9%)	1(5.9%)	0
It is not clear due to great variation between researchers and way of gathering Data	9(52.9%)	6(35.3%)	1(5.9%)	1(5.9%)
Describe the philosophical underpinnings of their approach to the phenomenon, to the research design, and the research analysis is not clear	8(47.1%)	4(23.5%)	3(17.6%)	2(11.8%)
There is no mention of how they determined "rigour" or fidelity to the phenomenon they studied which makes it not clear	6(35.3%)	9(52.9%)	1(5.9%)	1(5.9%)
It depends on different discipline	12(70.6%)	2(11.8%)	2(11.8%)	1(5.9%)
It depends on kind of qualitative research; approaches, assumptions and standards	14(82.4%)	2(11.8%)	1(5.9%)	0
Those who use one type/school of Phenomenology do not necessarily know or use other methods	13(76.5%)	3(17.6%)	1(5.9%)	0
Deficits in the question, definition of the analytic method and conclusions are superficial	8(47.1%)	6(35.3%)	2(11.8%)	1(5.9%)
Common mistake to use the term "Qualitative research". The data is the qualitative. It is more appropriate to use the term interpretive paradigm (naturalistic paradigm)	10(58.8%)	7(41.2%)	0	0
This is where many qualitative researchers experience problems	9(52.9%)	4(23.5%)	3(17.6%)	1(5.9%)
The use of the same technique may not mean the same for two different researchers	14(82.4%)	1(5.9%)	1(5.9%)	1(5.9%)
In recent years there is increasing quality in research papers using qualitative methods	16(94.1%)	0	1(5.9%)	0

Table 3. *The Frequencies and Percentages of Responses to Question Two*

Item	Agreed	Disagreed	Unanswered	Uncertain
Find no any discrepancies in research books that present the qualitative approach	2(11.8%)	12(70.6%)	2(11.8%)	1(5.9%)
Never reviewed such books.	3(17.6%)	12(70.6%)	2(11.8%)	0
It depends on the aim of the book	8(47.1%)	7(41.2%)	2(11.8%)	0
Introductory texts attempt to ensure that the basic information is consistent and therefore not ambiguous	9(52.9%)	6(35.3%)	2(11.8%)	0
Every book seems to describe qualitative methods differently, and every published research article that describes what was done to collect and analyze data also differs in their description of the method.	6(35.3%)	8(47.1%)	2(11.8%)	1(5.9%)
The research books often don't give the nuances according to the disciplines who use this approach e.g. Phenomonenography, ethnography.	8(47.1%)	5(29.4%)	3(17.6%)	1(5.9%)
The big discrepancy between Kathryn Charmaz and Barnie Glaser. Both do grounded theory but from a different perspective	11(64.7%)	2(11.8%)	3(17.6%)	1(5.9%)
Professions or sciences use and view the same qualitative approaches differently, like for instance social sciences and nursing or caring sciences	13(76.5%)	2(11.8%)	2(11.8%)	0
There may be some discrepancy between researchers	14(82.4%)	2(11.8%)	1(5.9%)	0
Discrepancies seem to be related to the different "Research methodology"	10(58.8%)	4(23.5%)	3(17.6%)	0
The paradigm for qualitative is not well defined or the context.	3(17.6%)	12(70.6%)	2(11.8%)	0
Discrepancies in the aspect of terminology are the use of operational terminology	7(41.2%)	8(47.1%)	2(11.8%)	0
The researcher must stay with the definitions, terminology and process of that approach	12(70.6%)	2(11.8%)	2(11.8%)	1(5.9%)

Table 4. *The Frequencies and Percentages of Responses to Question Three*

Item	Agreed	Disagreed	Unanswered	Uncertain
Basic assumptions are often not Addressed	12(70.6%)	4(23.5%)	1(5.9%)	0
Theoretical underpinnings of a method are not respected in the work	8(47.1%)	8(47.1%)	1(5.9%)	0
Different schools of qualitative research define assumptions and their purpose differently, but people sometimes interpret them wrongly	12(70.6%)	4(23.5%)	1(5.9%)	0
In qualitative method there are nuances and contexts, people, approaches and interpretations that are different	11(64.7%)	5(29.4%)	1(5.9%)	0
No discrepancy between qualitative method claims (assumptions) and the actual use of method	6(35.3%)	10(58.8%)	1(5.9%)	0
It depends in which type of qualitative research and where and what they are publishing	11(64.7%)	3(17.6%)	2(11.8%)	1(5.9%)

Table 5. *The Frequencies and Percentages of Responses to Question Four*

Item	Agreed	Disagreed	Unanswered	Uncertain
Qualitative research methodology is Unclear	4(23.5%)	11(64.7%)	2(11.8%)	0
There is always suspicion of qualitative methods	4(23.5%)	11(64.7%)	2(11.8%)	0
Discrepancies are critical and influence the quality of qualitative research	11(64.7%)	5(29.4%)	1(5.9%)	0
There is a major problem for determining quality, credibility and transferability	4(23.5%)	12(70.6%)	1(5.9%)	0
Do not do the following describe the philosophical underpinnings	7(41.2%)	5(29.4%)	3(17.6%)	2(11.8%)
Suspicion of the findings may be too Punitive	12(70.6%)	3(17.6%)	2(11.8%)	0
Not necessarily discrepancies are critical and may lead to suspicion in the research findings	7(41.2%)	5(29.4%)	3(17.6%)	2(11.8%)
If there is a good basic education regarding qualitative research and good reviewers and mentors the possibility of this will be diminished	13(76.5%)	1(5.9%)	3(17.6%)	0
Qualitative research may not meet criteria of the selected method, but still may produce meaningful findings, and can produce valid, rigorous findings.	9(52.9%)	7(41.2%)	1(5.9%)	0

As presented in Table 3, the highest agreement was detected in item 25 (There may be some discrepancy between researchers) with a percentage of 82.4%, followed by item 24 (Professions or sciences use and view the same qualitative approaches differently, like for instance social sciences and nursing or caring sciences) with a percentage of 76.5%. The overall agreement on question two was 36.7%.

On the contrary, the highest disagreement was detected in three items; item 17 (Did not find any discrepancies in research books that present the qualitative approach), item 18 (Never reviewed such books), and item 27 (The paradigm for qualitative is not well defined or the context) with a percentage of 70.6%, followed by two items; item 21 (Every book seems to describe qualitative methods differently, and all published research article that describe what was done to collect and analyze data also differ in their description of the method) and item 28 (Discrepancies in the aspect of terminology are the use of operational terminology) with a percentage of 47.1%. The overall disagreement of question two was 28.4%.

As presented in Table 4, the highest agreement was detected in two items; item 30 (Basic assumptions are often not addressed) and item 32 (Different schools of qualitative research define assumptions and their purposes differently, but people sometimes interpret them wrongly) with a percentage of 70.6%, followed by two items: item 33 (In qualitative method there are nuances and contexts, people, approaches and interpretations that are different), and item 35 (It depends on which type of qualitative research and where and what they are publishing) with a percentage of 64.7%. The overall agreement of question three was 20.8%.

In contrast, the highest disagreement was detected in item 34 (No discrepancy between qualitative method claims (assumptions) and the actual use of the method) with a percentage of 58.8%, followed by item 31 (Theoretical underpinnings of a method are not respected in the work), with a percentage of 47.1%. The overall disagreement of question three was 11.8%.

As presented in Table 5, the highest agreement was detected in item 43 (If there is a good basic education regarding qualitative research and good reviewers and mentors the possibility of this will be diminished) with a percentage of 76.5%. Followed by item 41 (Suspicion of the findings may be too punitive) with a percentage of 70.6%. The overall agreement on question three was 24.6%.

On the other hand, the highest disagreement was detected in item 39 (There is a major problem for determining quality, credibility and transferability) with a percentage of 70.6%. Followed by two items; item 36 (Qualitative research methodology is unclear) and item 37 (There is always suspicion of qualitative methods) with a percentage of 64.7%. The overall disagreement on question four was 20.8%.

3. Discussion

The purpose of this study was to identify the crucial discrepancies in the qualitative research approach and its effect on research findings based on Delphi web-based technique. The results of the first round were addressed to expand the questions into several items in the second round. For question one which was: "In your opinion, do you think qualitative research methodology is clear among researchers who used this approach?" the results indicated that there was a high percentage of agreement among experts, especially item 16: "In recent years there is increasing quality in research papers using qualitative methods". The rationale for

the lack of clarity (when present) is mostly attributed to the fact that the field of qualitative research is broad and diverse, not lending itself to evaluation by one set of criteria. Therefore, researchers and scholars need to acknowledge that each qualitative research study might be unique in its theoretical positioning and approach, because it can be grounded on a specific theoretical framework that requires using different methodological approaches to guide data collection and analysis. This may justify the presence of different evaluative criteria to judge the quality of each individual qualitative study [7, 26]. In addition, Whittemore, Chase, and Mandle [26] argued that qualitative research is contextual and subjective versus generalizable and objective. Un-clarity in methodology was imposed on qualitative research as a limitation, this point is addressed by researchers in their recent and future qualitative research projects.

Regarding question two: "Did you find any discrepancy in research books that present the qualitative approach? For example; in defining research terminology; if yes, please mention them?" the results indicated that there was an approximately equal number of experts who agreed and those who did not agree regarding the items that represent this question. The agreement was particularly high for items 25 (There may be some discrepancy between researchers), and item 24 (Professions or sciences use and view the same qualitative approaches differently, like for instance social sciences and nursing or caring sciences), which is consistent with what Creswell [9] and Holloway and wheeler [3] argued about sampling strategies in qualitative research. Although qualitative research involves the use of purposive sampling, a random approach may negate burdens of researcher bias in the selection of participants [28, 29]. Furthermore, Morrow [28] emphasized the importance of using both probability and non-probability sampling strategies in qualitative research. Sandelowski [19] agreed with these results by showing that qualitative approaches do not encompass a single universally understood position due to multiple and evolving philosophical understandings of the world and the nature of humanity.

Question three was: "Do you find any discrepancy between qualitative method claims (assumptions) and the actual use of the method?" The result indicated that there were low levels of both agreement and disagreement regarding the items that represent this question (agreement had a higher percentage). Most of the agreement was on item 30 (Basic assumptions are often not addressed) and item 32 (Different schools of qualitative research define assumptions and their purposes differently, but people sometimes interpret them wrongly). The low levels of both agreement and disagreement regarding the items that represent this question might be due to the presence of different qualitative approaches that differ in their assumptions and theoretical bases, and differ in their complexity which make some of them easier to follow their assumptions while others are not. This resulted in the inability of experts to identify specific views that apply for all qualitative research approaches. This is consistent with what Sandelowski and Barroso [14] argued

that qualitative research can be judged only on its individual merits based on the research report. Whittemore, Chase, and Mandle [26] emphasized that congruence should be evident between the research question, the method, and the findings; between data collection and analysis; between the current study and previous studies; and between the findings and practice, and study findings should also demonstrate logical congruency as well as congruency with the philosophical or methodological perspective articulated by the investigator. By this, discrepancies between qualitative method assumptions and the actual use of the method could be reduced.

Finally for question four: "Based on the answer for the second and third questions, if there was anything mentioned, do you think these discrepancies are critical and may lead to suspicion in the research findings?" there was approximate equality in agreement and disagreement regarding the items of this question. A noticeable high percentage of agreement was in item 43 (If there is a good basic education regarding qualitative research and good reviewers and mentors the possibility of this will be diminished) and a high disagreement percentage in item 39 (There is a major problem for determining quality, credibility and transferability). The approximate equality in agreement and disagreement regarding the items of this question could be due to its nature, as some discrepancies may negatively affect the results more than others. Based on these findings, we can conclude that when qualitative research is based on determining the knowledge to be sought and reviewed by experts in the qualitative field, the possibility of discrepancies and subsequent low reliability and validity will be decreased. This was reported by Caelli, Ray, and Mill [13, 29] regarding determining the level of knowledge and the process of seeking it through the entire study. These results are emphasized by Whittemore, Chase, and Mandle [26] who argued that every qualitative study has biases and particular threats to validity, all methods used have limitations, and research involves multiple interpretations as well as a moral and ethical component inherent in judgments. Shenton [27] has argued that the credibility of the researcher is important in qualitative research as it is the person who is 'the major instrument' of data collection and analysis. Furthermore, he has claimed that even when different investigations offer results that are not entirely consistent with one another, this does not necessarily imply that one or more is untrustworthy. It may be that they simply reflect multiple realities, and, if an appreciation can be gained of the reasons behind the variations.

3.1. Implications and Recommendations

The qualitative research methodology is an essential approach that is used extensively in social sciences including nursing and it is a core course at Doctorate level. This survey implies that the qualitative textbooks need to be more consistent with more simplification of the ambiguous terms. Our study suggests that the Delphi technique is an effective method for gathering expert input to evaluate the qualitative

research methodology and its discrepancies to find out any suggestion for improvement; particularly due to the absence of evaluative guideline criteria to investigate qualitative textbooks discrepancies.

4. Conclusion

In this Delphi study, the process of selecting experts in qualitative research methodology was challenging for the research team. The experts who were invited to participate met the inclusion criteria, but they may not be the most expert individuals in this area. Many potential participants requested to be excused to participate because they have no or little experience in the qualitative methodology. This study has been carried out over two rounds, it was considered to be sufficient to reach the consensus. The response rate was considerably low in the first round. This may have influenced the results of this study. This low response rate may be associated with the uncertainty among the scholars about the Delphi technique because it demands from the participants more than a regular study. The participants were from different universities in eight countries. They were from different backgrounds and the topic of this study was familiar to all of them. This diversity could provide enrichment in the opinions than if all of the participants were from one setting. However, the findings denote the opinions of the experts who agreed to participate in this study and do not necessarily ascertain the truth.

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