Research Article

Reflecting on 'meaningful research': A qualitative secondary analysis

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Reflection on 'meaning' and 'meaningful research' led the researchers to further explore data obtained in an original study which aimed to develop a strategy to improve the contribution of nurses towards health research. The purpose of this further exploration, using a qualitative secondary analysis, was to explore and describe what important stakeholders in research, as well as nurses, see as meaningful research. It was expected that this analysis might contribute to refine the strategy and shed light on how research can be communicated to nurses as a more meaningful activity.

The original data sets, namely 28 lists of open-ended questions and eight transcripts of focus group interviews, were analysed, using content analysis. The results show that there are similarities, but differing emphasis, between the viewpoints of the mentioned stakeholders and nurses. It is recommended that stakeholders in research, including nurses, need to establish and work in respectful, supportive, research capacity building partnerships when conducting research. Following this approach might lead to research being understood and experienced by nurses as a meaningful activity.

Introduction and problem statement

The health research community (academics, research institutions) emphasizes the need for research and expect health care professionals, such as nurses, to be involved in research (World Health Organization, 2002:1). In the case of research as an activity expected of nurses, it seems that some nurses in the South African context might attach a negative meaning to conducting research, and might experience anxiety and even hostility towards research (Du Plessis, 2007:3). In a study conducted by Du Plessis (2007:3) it was confirmed that nurses do not engage in research in significant numbers, and they are consequently not regarded as recognized researchers, while at the same time nurses are in an ideal position and have the potential to conduct valuable research.

The mentioned research asked questions such as:

- *What is the opinion of stakeholders in health research (individuals/groups influenced by or influencing health research conducted by nurses) regarding the contribution of nurses towards health research in South Africa?; and*
- *What can be done to enhance*

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the contribution of nurses towards health research in South Africa?

The purpose was thus to identify the opinions of stakeholders in health research, including nurses (working in education, research and practice) regarding the contribution of nurses towards health research. A strategy to enhance nurses' research contribution was developed (see Diagram 1).

However, an unexamined question remained, namely: What is the meaning the health research community, including nurses, attach to research. This is an important question, as meaning is expressed in our approach to activities, and can be seen as a motivational factor in the decision to be involved with someone or something (Gould, 1993:60, Evangelista, Doering & Dracup, 2003:251, Vachon, 2008:220), such as research.

As background, the concept 'meaning' is reflected upon, with specific reference to the meaning of research.

Meaning

The need for our lives and activities to make sense – to have meaning – is universal and compelling (Willis Harman in Souba, 2002:140). 'Meaning' is seen as the significance or importance of our life or something in our life (Souba, 2002:140, Davis, Ker & Robinson Kurpius, 2003:363). Meaning provides a sense of purpose, and a feeling that the effort extended is worthwhile and makes a contribution to the greater good or to something/someone beyond oneself (Souba, 2002:140). Experiencing 'meaning' further leads to directedness, engagement, commitment, a sense of connectedness and a sense of mission in life (Souba, 2002:140, Wood & Hebert, 2005:75, Beuscher & Beck 2008:94, Richards, 2008:68).

Additionally, Gould (1993:40), in a classic work explaining the viewpoints of Victor E. Frankl, states that the realm of activities is one of the three areas in which man can find meaning. The other two realms are that of personal experience and of attitudes (suffering, sacrifice). The realm of activities includes meaning-fulfilling work, such as when you do work with a specific purpose. One might find the realm of activities meaningful if ideals, purpose and belief fit with the type of work, outcome and values of the work. If however, these ideals, purpose or beliefs are in conflict with the expectations of the activity, meaning is challenged. Man therefore tends to choose those commitments that will bring him meaning (Gould, 1993:42).

One such activity is research. While research in itself cannot confer meaning, meaning comes from the value, significance and/or worth attached to research (Souba, 2002:141, Vachon, 2008:219), in other words: what is seen as meaningful research. Gould (1993:60) furthermore states that meaning and the significance attached to something is unique, and must be explored for different individuals, or in this case, for specific groups.

The above discussion implies that different stakeholders in research, such as experts in health-related research (including nurses), health research committees, multi-disciplinary health care teams and researchers, nurse academics, nurses in practice and nursing students, might have different viewpoints on what "meaningful research" is, and therefore might have differing levels of motivation to be involved in research.

Research questions

The reflections on the primary study and subsequently on the meaning of research prompted the following questions:

- *What do stakeholders in research see as meaningful research?*
- *What do nurses see as meaningful research?*

Purpose

The purpose of this research was to:

- *Explore and describe what stakeholders in research see as meaningful research.*
- *Explore and describe what nurses see as meaningful research.*

It was argued that understanding what nurses and other significant stakeholders see as meaningful research might contribute to the refinement of the strategy that was developed in the primary study and may shed light on how research can be communicated to nurses as a more meaningful activity.

Research method – Qualitative secondary analysis (QSA)

A qualitative secondary analysis was seen as appropriate, as this method is used to re-explore existing data, in this case to explore dimensions that were not explored in the primary study (Burns & Grove, 2005:264). Thorne (1994:266) refers to this type of qualitative secondary analysis as a retrospective interpretation.

Rich and in-depth data were generated in the primary study, with the potential for re-exploration. This existing data, often referred to as original data, was thus re-explored in order to obtain new insights.

Original data set

The original data set consists of results from a Delphi study and focus group interviews.

The Delphi study

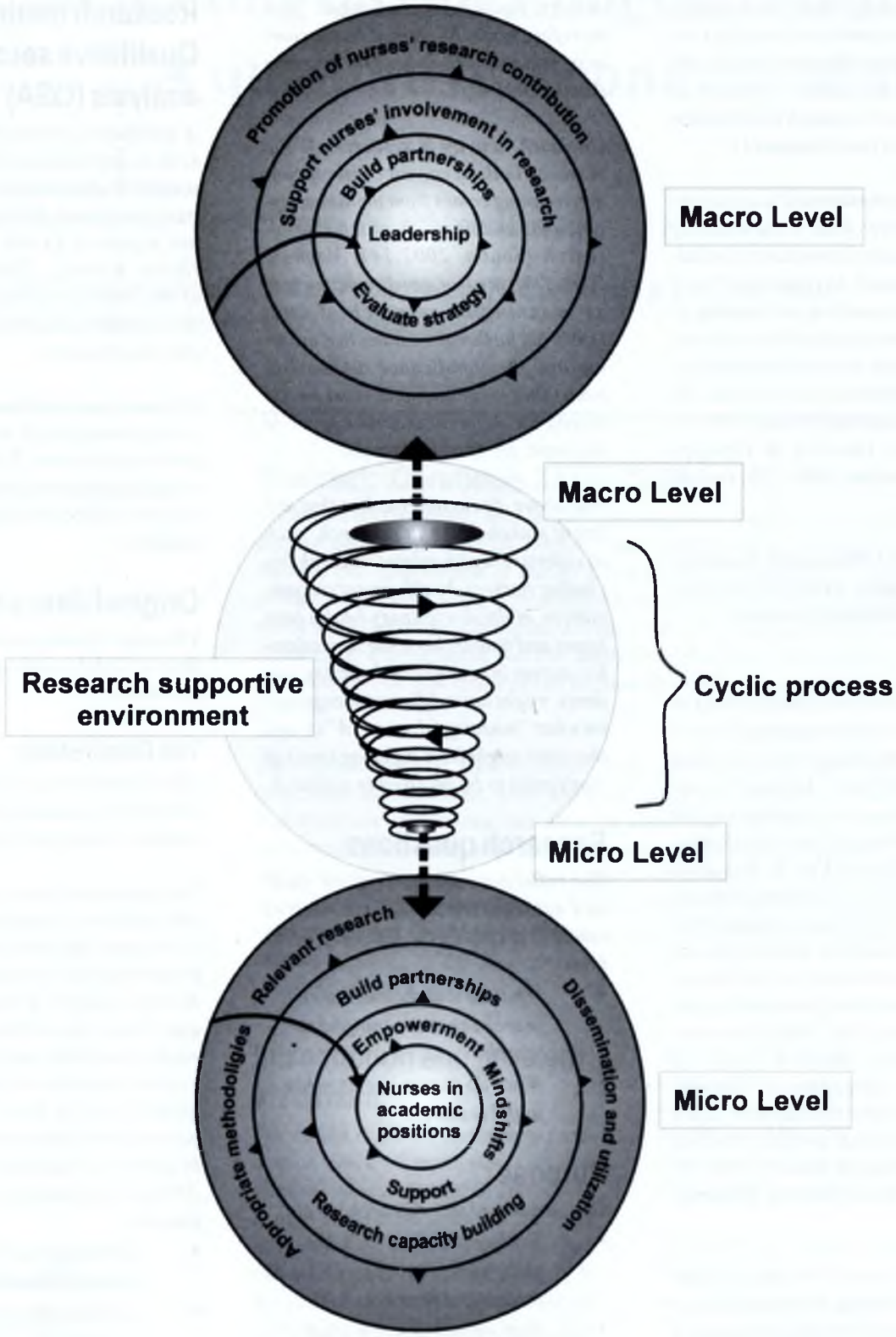
The Delphi study (Burns & Grove, 2005:407) consisted of three successive rounds of data gathering.

The purpose of round one of the Delphi study was to explore the opinions of the panel of experts on a strategy to promote nurses' contribution towards health research. A list of open ended questions was utilised. The open-ended questions were based on a literature overview on health research globally and in South Africa, and in particular on health research conducted by nurses internationally, and in South Africa. These questions explored opinions on:

- *a strategy to promote nurses' research contribution;*
- *collaboration in health research;*
- *the importance of relevance of health research;*
- *research priorities;*
- *appropriate research methodology;*
- *research capacity building;*

Diagram 1: A strategy to promote nurses' research contribution

Diagram 1: A strategy to promote nurses' research contribution



Source: Du Plessis (2007:289)

- *research dissemination and utilization;*
- *community involvement in research;*
- *quality of health research;*
- *resources needed for health research; and*
- *the role of the nurse in health research.*

Round two served to present the results of the first round to the participating stakeholders for verification of opinions and to establish the level of consensus.
The final round was conducted to give feedback to the panel of experts on aspects that they strongly agreed upon to determine whether these should be included in a strategy and to explore further convergence to consensus on these aspects.

The study population included national as well as international stakeholders in health research who are influenced by or who influence health research conducted by nurses in South Africa. Cluster sampling was used. The clusters included stakeholders in health research funding, professional nurses who have input in national nursing regulatory institutions, stakeholders who have input in multi-disciplinary regulatory institutions, professional nurses in academic and educational positions, professional nurses in practice, and professional nurses with international input in health, research and/or nursing. Selection criteria included that potential participants should:

- *include both South African and international experts, to obtain national and international viewpoints,*
- *include not only nurses, but be from multiple health-related and/or health research-related backgrounds, to ensure that different viewpoints are obtained;*
- *be persons with experience in health research;*
- *be in a position of a stakeholder influencing and/or influenced by health research; and*
- *have access to e-mail and/or facsimile facilities in order to receive and send the lists of open-ended questions.*

Existing databases (Hasson, Keeney & McKenna, 2000:1012) were used to gain access to potential participants within the clusters. A number of 197 individuals/organizations were contacted by e-mail or fax and invited to participate. During round one a total of 28 experts participated. During round two only 19 experts responded. In order to enhance this response rate, the invitation was extended to the original population identified in round one, with a further 12 participants responding. Statistical data analysis indicated that there was no significant statistical (alpha) or practical (effect size) difference between the responses of these two groups, and the responses were therefore interpreted as from one group of participants (n=31). During round three 18 of these experts participated.

The results of the Delphi study consisted of 28 completed lists of open-ended questions, as well as descriptive statistics on the level of consensus reached amongst the panel of experts. For the purpose of the qualitative secondary analysis, only the completed lists of open-ended questions were used, as the statistics did not relate to the research question asked in this analysis.

The focus group interviews

As a follow-up on the Delphi study eleven focus group interviews were held with different stakeholders. The purpose was to verify a proposed strategy developed based on the results of the Delphi study, and to facilitate discussion on the possibilities for implementation of the strategy.

Purposive sampling was implemented, using selection criteria (Babbie & Mouton, 2004:166). Selection criteria included that participants should have been willing to participate in a group, that they participated voluntarily after informed consent were obtained and that they should have formed part of a group of stakeholders who influence or are influenced by research conducted by nurses in the Southern District of the North-West Province. The participating groups included a provincial health research committee (n=6), nurse academics at a university's nursing department (n=8), nurse educators at a nursing college (n=4), clinical facilitators at a university's nursing department (n=4), undergraduate nursing students at a university's nursing department (n=6), undergraduate nursing students at a nursing college (n=6), post-basic students at a nursing college (n=8), post-graduate nursing students at a university's nursing department (n=5), a multi-disciplinary team at a university's faculty of health sciences (n=4), a multi-disciplinary team practicing at district level of a province (n=7), nurses practicing in a specific district in a specific province (n=15).

The results of the focus group interviews are transcripts, which were analyzed and described in categories of opinions on the strategy (Du Plessis & Human, 2007:41-49). For the purpose of this qualitative secondary analysis, eight transcripts, namely of the focus group interviews with nurses (academics, educators, clinical facilitators, students and nurses in practice) were used.

Analysis

Content analysis was used, as suggested by Strydom and Delport (2002:327). The 28 completed lists of open-ended questions and the eight focus group transcripts were analyzed asking the question: "What do they see as meaningful research?".

In both cases, the steps for analysis suggested by Henning, Van Rensburg and Smit (2004:104-105) were followed, namely:

1. *"Read through one data text to form an impression of the context and units of meaning." In this case 'units of meaning' was seen as central statements to which value/significance are attached, e.g.:*
   Statement: "Nurses are concerned about certain health issues and some conduct research about these issues at a smaller scale ... "
   Value: "Unfortunately the results and recommendations will not be communicated or generalized ... ". The induction was then made that research is seen as meaningful if it is communicated and generalized.
2. *Segment units of meaning in one or more sentence or phrase. Use a marker to show the end*

of a unit.

3. *Label a unit of meaning in more than a single word. Write this label in the margin with an arrow pointing to the text.*
4. *Look for possible groupings of the codes.*
5. *Make a list of all the codes and then read the whole text again to see whether the codes make sense and whether there is some coherence. Also make sure that codes can be related to the research question.*
6. *Repeat the process with all texts.*
7. *Categorize the codes, using the data as a guide in deciding what a category should be called.*

Trustworthiness

According to Gladstone, Volpre and Boydell (2007:439) trustworthiness in qualitative secondary analysis centers around thoroughly describing the research process as well as the logical link between the original set of data and the question/s asked in the qualitative secondary analysis.

In this case, the research process is thoroughly described and this description was peer reviewed by research experts. There is a logical link between the original data set and the question/s asked in this analysis, as the qualitative secondary analysis questions arose from the original data set. Additionally, the method for analysis in the secondary analysis is highly similar to the method for data analysis used in the original study.

Ethical issues

Guidelines based on the discussion of qualitative secondary analysis by Gladstone, Volpre and Boydell (2007:39) were followed: Ethical permission for the original study was obtained from the relevant authorities and participants (Du Plessis, 2007:23). The questions asked in the secondary analysis did not violate the informed consent obtained for participation in the original study, which asked participants to provide consent that data be used to develop and refine a strategy to promote the contribution of nurses towards health research in South Africa. Additionally, anonymity is an essential feature of the Delphi study and was thus ensured, while all contextual data that might reveal the identity of participants of the focus group interviews were removed in this qualitative secondary analysis. It is thus the judgment of the author that the participants in the original study were not harmed through further exploring the original set of data by means of this secondary analysis.

Results

The results of the qualitative secondary analysis of the lists of open-ended questions and the focus group interviews are presented separately, followed by a discussion of the results.

Results of the qualitative secondary analysis of the lists of open-ended questions

The results of this analysis could be formulated as a statement:
Meaningful research was seen as significant, rich (with depth), valid research that has a significant impact. In the case of the discipline of nursing, this research is conducted by skillful, motivated and research-minded nurses within a research-supportive environment.

This statement is discussed in depth. In the discussion, statements or phrases in italics and quotation marks are comments from the transcripts and serve as verification of the results.

Significant, rich (with depth), valid research

This type of research was seen as research that has an adequate sample size, depth and relevance to adequately address health needs and issues. It should generate valid findings so that recommendations can be generalized. Such research was seen as significant as it has the potential to attract funding and to enable research collaboration, research capacity building and evidence-based practice: thus having impact.

It was repeated that not only descriptive, qualitative studies should be emphasized, but that clinical research, intervention studies and action research on large scale should also be conducted. Furthermore, research should address actual problems and the methodology should be creative, dynamic, have depth and should be directly prescribed by the research problem. If the community is involved, ethical aspects such as respect and equality should be adhered to, so that the results and recommendations are accepted and more likely to be implemented.

Collaboration amongst nurses in different sectors (academic and clinical), as well as with other disciplines and sectors, on local, national and international level was also seen as important. Collaboration seems to be linked to meaningful research in that it contributes to: limiting duplication, larger, meaningful studies with improved output, larger samples and a larger scope. It also contributes to leadership development, research capacity building and the development of research expertise, which was seen as needs in the nursing profession. Collaboration improves ownership and implementation, and through collaboration those involved develops insight and understanding as well as strengthened relationships.

Impact

Research was seen as having an impact if it 'makes a difference' in the context where the research is being conducted. In this case this impact refers to improving practice – for example through generating practice guidelines and/or implementing results – as well as to influencing relevant policy and the education of nurses.

Dissemination and communication of results was seen as an important way of ensuring that research has an impact. Publication to the scientific community as well as to the broad community was advised. Dissemination provides an indication of the quality of the research and it contributes to research findings and recommendations being accessible.
It was also strongly suggested that researchers implement and test recommendations. The impact of research is also improved through collaborative research, collaboration with the community/target group, high quality research and specific research designs such as action research, intervention studies and clinical trials.

Skillful, motivated and research-minded nurses within a research-supportive environment

The panel of experts viewed nurses as

having the potential to contribute meaningfully to research. Their education (based on both human and natural sciences), interpersonal skills, access to communities as well as their scope and nature of practice enables them to identify, interpret and communicate research issues that other multi-disciplinary are not able to do. They comprise a large component of the health professions and are therefore expected to be involved in health-related research.

Nurses should therefore be skilled to conduct research. They should ensure a comprehensive approach in research, and not, for example, let preferences in methodology lead research projects, but let the research problem guide them in the choice of methodology. They should 'pull strengths together' in collaborative research in order to be comprehensively skilled as a group in order to address diverse and complex health-related research problems.

Research capacity building plays an essential role. Nurse educators and research supervisors should themselves be skilled and involve undergraduate and post-graduate students in research projects. They should teach research at the level of the students in a clear and practical manner.

They should furthermore portray a positive attitude and enthusiasm regarding research, in order to foster positive attitudes regarding research. The value of research to "generate new knowledge and justify the existence of the nursing profession" should be clarified.

Research-mindedness amongst nurses should be fostered, i.e. critical thinking, identifying research problems in everyday duties, reflective practice, implementing evidence-based practice, and having confidence in conducting, communicating and conducting research.

Additionally, nurses at all levels and in different settings should be motivated to be involved in research through the availability of resources, rewards, incentives and career paths, constituting a research-supportive environment.

Such nurses have the potential to strengthen the impact of research, as they will tend to view research as important and to be involved in relevant, meaningful research that makes a difference in the context where they work.

Results of the qualitative secondary analysis of the focus group transcripts

These results could be formulated in similar statements, namely:
Meaningful research is research that impacts on practice and is rewarding in terms of recognition of nursing as a profession, personal satisfaction and career development. Support, in terms of research capacity building as well as supportive leadership and time, is seen as important.

These statements are discussed in detail. In the discussion, statements or phrases in italics and quotation marks are comments from the transcripts and serve as verification of the results.

Meaningful research is research that impacts on practice

Nurses are of the opinion that research should improve practice in such a way that there is evidence that research does make a difference. The aim of research should be to improve practice, "real" problems should be researched, and research should be practical. Research should build the profession, while the results should also prove how time and money could be saved. Results should be disseminated and implemented as "new ways of doing things" and as proof that research has an impact. Follow-up research should be conducted and research results should be translated into evidence-based practice, and products and patents as outcome of research should be considered.

Research should be rewarding in terms of recognition of nursing as a profession, personal satisfaction and career development

Research should be rewarding within the framework that nurses see as rewarding.

Nurses see research as a manner in which the nursing profession, as well as nurses as professionals and equal team members, can gain recognition within the multi-disciplinary team. It helps them to keep pace with newest information and "gives us [nurses] a voice", resulting in having confidence to be engaged in research and to take in their place as equal team members.

Additionally, research should result in personal satisfaction of "seeing something implemented and it works", "when I feel what I am doing means something" and when nurses "know of what use is what you [they] are doing". This satisfaction might also be experienced when the research topic is of interest to the nurse. Nurses also see obtaining a degree or continuous development as rewarding.

Career development rewards mentioned include being able to specialize in a specific field, promotion and salary increase.

Support, in terms of research capacity building as well as support structures and time, is seen as important

Nurses are de-motivated to be involved in research through their fear of research as being difficult and 'big', their negative attitude towards research, as well as difficult work circumstances. They therefore need to be supported.

Research capacity building: Research should be taught enthusiastically and in a way that its impact in practice is evident. Nurses need to understand "the value of research on everyday level". Educators should for example share their own experiences and be confident in conducting research and research supervisors should offer appropriate structure and support. Before nurses embark on masters degree studies, a bridging or refresher course should be offered. Nurses also mentioned that a research culture and research milieu should be fostered.

This research culture and milieu should not only be fostered through education, but also in practice through supportive, structure-providing and up-to-date mentoring and leadership. Communication channels and structures need to be in place, and nurses should be guided in reading and applying literature.

Furthermore, nurses surviving in difficult work circumstances of staff shortages and work overload should be allowed time and resources to be involved

Table 1: Refined aspects of a strategy to promote nurses' research contribution

Aspect in strategy	Original strategy (Du Plessis, 2007:290-301)	New insights
Creating partnerships	*Research leaders should create partnerships to align visions about research, to conduct relevant research and utilise research results. The significance and positive impact of the research will in turn stimulate an improved perception of nurses as researchers, strengthen research partnerships and foster a supportive environment for research.*	*Stakeholders in research, including nurses, need to establish and work in respectful, supportive, research capacity building partnerships when conducting research. Specific attention should be given to clarifying roles and expectations, developing common values and rewards as well as acknowledging the role of nurses in research. A starting point to build these partnerships can be the shared perception that research needs to have a significant impact in order to be meaningful.*
Research capacity building	*Research capacity building at informal, undergraduate, post-registration and postgraduate levels should take place, to foster research awareness, readiness to be involved in research, research-mindedness and involvement in significant research.*	

in research, requiring managers and mentors to be supportive of research and involving nurses in research teams.

Discussion

Similar results were obtained from the two data sets. An important similarity seems to be the expectation that research needs to have a significant impact. This expectation is shared with the wider health research community, such as the South African Medical Research Council (2009:1); while "being able to make a difference" is indeed of importance to role players in the health professions (Souba, 2002:142).

Another important similarity is that a research-supportive environment, of which research capacity building, mentorship and leadership forms an integral part, is seen as necessary. In line with this finding, Souba (2002:142) emphasizes the importance of education, mentoring and leadership in "channeling potential", facilitating the experience of being part of something larger than oneself, inspiring the development of similar values and discovering purpose. All of these aspects contributes to experiencing "engagement" which is an essential component of perceiving activity, in this case 'research', as meaningful.

Apart from the similarities, differing emphasis is also evident in the results. These different emphases might be due to differing contexts and goals, which according to Pizzolato (2008:239) has an influence on the meaning-making process. Acknowledging these differences might be crucial in establishing research partnerships and in facilitating nurses' meaning-making process regarding research.

Recommendation

Based on the results and the discussion of the results, it is thus recommended that the strategy developed in the primary study be refined, specifically regarding creating partnerships and research capacity building as an outcome of such partnerships (see Table 1). These new insights might facilitate a more positive meaning-making process amongst nurses in terms of research, guiding them to experience research as a meaningful activity.

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