

Article

Situational Factors in Focus Group Studies: A Systematic Review

Arne Orvik, MPolSc
Associate Professor
Department of Health Sciences
Aalesund University College
Aalesund, Norway
arne.orvik@hials.no

Lillebeth Larun, PhD
Researcher
Norwegian Knowledge Centre for the Health Services
Oslo, Norway
Lillebeth.Larun@kunnskapssenteret.no

Astrid Berland, MSc
Associate Professor
Department of Nursing Education
Stord/Haugesund University College
Haugesund, Norway
astrid.berland@hsh.no

Karin C. Ringsberg, PhD
Professor
Director, Centre for Health Promotion
Nordic School of Public Health
Gothenburg, Sweden
karin.ringsberg@nhv.se

© 2013 Orvik, Larun, Berland, and Ringsberg.

Abstract

The aim of this study was to see how contextual factors are expressed, used, and analyzed in data collected in focus group discussions (FGDs). The study includes an assessment of how the methodological reporting of contextual factors might influence and improve the trustworthiness of articles. Articles reporting workplace health, stress, and coping among health professionals were identified in a systematic review and used in the analysis. By using Vicsek's framework of situational factors for analysis of focus group results as a starting point, we found that contextual factors were most frequently described in the method sections and less frequently in the results and discussion sections. Vicsek's framework for the analysis of focus group results covers six contextual and methodological dimensions: interactional factors, personal characteristics of the participants, the moderator, the environment, time factors, and the content of FGDs. We found that the framework does not include a consideration of psychological safety, ethical issues, or organizational information. To deepen the analysis of focus group results, we argue that contextual factors should be analyzed as methodological dimensions and be considered as a sensitizing concept. Credibility, confirmability, dependability, and transferability can be strengthened by using, reporting, and discussing contextual factors in detail. The study contributes to elucidating how reporting of contextual data may enrich the analysis of focus group results and strengthen the trustworthiness. Future research should focus on clear reporting of contextual factors as well as further develop Vicsek's model to enhance reporting accuracy and transferability.

Keywords: focus groups, health professionals, mixed methods, situational factors, template analysis, workplace health

Acknowledgements: We would like to thank the research librarians, Ingvild Kirkehei, Norwegian Knowledge Centre for the Health Services, and Helene Lie, Akershus University Hospital, for their professional help. We would also like to thank our colleagues for their constructive comments.

Over the last few decades, focus group discussions (FGDs) have been widely and increasingly used as a data collection method within the field of health care research and social science (Duggleby, 2005; Fern, 2001; Freeman, 2006; Twohig & Putnam, 2002; Webb & Kevern, 2001; Wilkinson, 1998). FGDs are generally regarded as an appropriate method for evaluating attitudes, knowledge, and experiences within the field of health care (Barbour, 2007; Berland, Natvig, & Gundersen, 2008; Blythe, Baumann, & Giovannetti, 2001). Such methods are characterized by carefully planned discussions on defined areas or topics, and group dynamics are used to explore and clarify views that might otherwise be less accessible or evident in the context of individual interviews (Morgan & Krueger, 1998). Researchers such as Asbury (1995) have emphasized the importance of analyzing FGDs in terms of their specific context. Accordingly, many researchers have focused on descriptions of the participant inclusion criteria and research ethics in the method sections of their research or stressed the importance of emphasizing and making visible the group processes and interactions in FGDs (Barbour, 2007; Duggleby, 2005; Hollander, 2004; Kitzinger, 1994; Reed & Payton, 1997; Sim, 1998).

Although many authors have argued that analysis of focus group results should be seen in its context, which includes aspects such as interactional factors and personal characteristics, most disciplines continue to omit this detail or fail to emphasize it (Vicsek, 2007, 2010). A review of nursing literature, for example, indicated that the context of focus group methodology is seldom discussed in relation to the reported findings (Webb & Kevern, 2001).

Such omissions indicate that there is a need for further analytical development within research related to focus group methodology, including an understanding of how contextual aspects may influence focus group results. As health professionals and health service researchers in the field of workplace health, stress, and coping, we wished to examine how articles in this field express contextual and methodological detail related to FGDs. The aim of this study therefore was to elucidate the extent to which contextual aspects of focus group methodology are expressed and analyzed in articles that collect data by means of FGDs, in the field of workplace health, stress, and coping among health professionals, and to analyze how such reporting reflects the trustworthiness of these studies. By including contextual factors in our analysis, the ultimate aim of this study was to contribute to a further reflection on how reporting of contextual data may enrich the results of focus group studies and strengthen their trustworthiness and transferability.

Method

We applied a mixed methods research design, a mainly qualitative approach with quantitative elements incorporated, to analyze the included articles (Graneheim & Lundman, 2004; Morse, 2003; Polit & Beck, 2006). Our method was also inspired by a quanti-qualitative design for focus group studies (Grim, Harmon, & Gromis, 2006).

Theoretical Framework

We utilized Vicsek's (2007, 2010) framework for analyzing the results of focus groups. This framework is rooted in both social psychology and social constructivism, and we viewed it as a valuable operational tool and a foundation for developing a critical understanding of focus group analysis. Vicsek argues that data from focus groups are dependent on the context and must be evaluated and analyzed in terms of this. According to this analytical approach, context is examined at the level of specific statements. This gives greater emphasis to the process by which opinions emerge and are shaped during group discussions, as well as to the importance of describing and analyzing the situation of the focus group as a whole. Vicsek's (2007, 2010) framework includes six key situational factors (see Table 1):

Table 1

Vicsek's Situational Factors

Situational Factor	Description
Interactional factors	Psychological and social psychological mechanisms: social influence, conformity, minority influence, individual influence, conflict avoidance, interactions between the moderator (researcher) and the participants.
Personal characteristics of the participants	Demographic backgrounds of the participants; group members' knowledge of the theme discussed, how they behave, and how they feel about being there; roles assumed during the FGDs.
The moderator	The moderator's style, control in the group, professionalism, power, and knowledge of the issue; moderator roles assumed in the session: the expert, the challenger, and the unfamiliar seeking for enlightenment.
The environment	Physical characteristics of the environment where FGDs take place, its latent influence on the outcome, characteristics of the furniture in the room, etc.; how peaceful and separated the environment is from others, its degree of formality.
Time factors	The time of day for conducting a FGD: how long it lasts, how far the participants are able to concentrate on specific questions, for example questions arising at the end of the day.
Content	Elements introduced in the guide or by the moderator in the session; information to participants, language, order and style of questions; the use of techniques; how personal the theme is, expectations among participants or in society.

Vicsek's analytical framework was chosen for this study because it explicitly recognizes specific methodological elements affecting FGDs. Few other analytical frameworks emphasize the link between the contexts of FGDs and the operational impact that contexts may have upon the research results. However, given that our analysis was mainly qualitative in approach, we also applied and interpreted Vicsek's scheme of situational factors in a broader way, using it as an analytical foundation to raise awareness of methodological and contextual issues across and beyond those specified in the original scheme. This broader, sensitizing approach includes a critical assessment and offers more general guidance rather than directing researchers to specific details of the study (Blumer, 1954; Glaser & Strauss, 1967). In this article, the concept of *situational factors* refers to Vicsek's scheme, while *contextual factors* conceptualize a broader approach to the phenomenon.

We combined a template analysis and a content analysis approach when organizing and interpreting the findings according to the framework described by Vicsek. The template approach allowed us to describe already known phenomena (i.e., contextual and methodological aspects) in new ways using pre-existing theory-based categories. Such a coding template reduces the amount of data being considered and helps to establish connections between data (Crabtree & Miller, 1999). A template analysis style was also chosen because it could be refined, supplemented, or even deleted as further data were gathered and interpreted (King, 2004; Malterud, 2001; Polit & Beck, 2006). Viewing situational factors in an open and sensitizing way enabled us to incorporate new and complementary elements into Vicsek's original theoretical framework, and to do a critical assessment, in line with its constructivist platform.

Data Collection

A systematic literature review (Hart, 1998; Melnyk & Fineout-Overholt, 2011) was used as a design for this study. Those articles using focus group discussion (FGD) methods within the field of workplace health, stress, and coping among health professionals were included. To be selected for inclusion, studies had to be empirical and include a qualitative approach. FGDs also needed to be the *only* data collection method as the use of multiple methods may have made it difficult to differentiate between data gathered through FGDs and data that had been gathered using other methods.

MEDLINE, EMBASE, and CINAHL records were searched for the period between January 2004 and February 2009, using topic-specific subject headings (e.g., in MEDLINE the following medical subject headings were used: focus groups, qualitative research, health personnel, personnel hospital, workplace, stress, and coping) and text words (e.g., in CINAHL these words were included: qualitative studies, empirical research/studies, workplace, stress, stress occupational/stress management, burnout professional, coping, health personnel, health facility, medical staff, and hospital). Focus group studies published in English or Scandinavian languages were included. 481 articles, including duplicates, were identified in the initial search. Two of the authors of this article independently read all the abstracts and read the 55 articles (16 from MEDLINE, 15 from EMBASE, and 24 from CINAHL) which fulfilled the inclusion criteria and were retrieved in full text. Of these, six articles were duplicates, hence 49 articles were read in full text. Thirty-five of these articles were excluded as they did not refer to focus groups, or to relevant themes. Of the remaining 14 articles, an additional three were excluded due to their use of mixed methods for data collection. One was excluded because the theme of the article was not directly relevant to this study, which left us with ten included studies (see Figure 1).

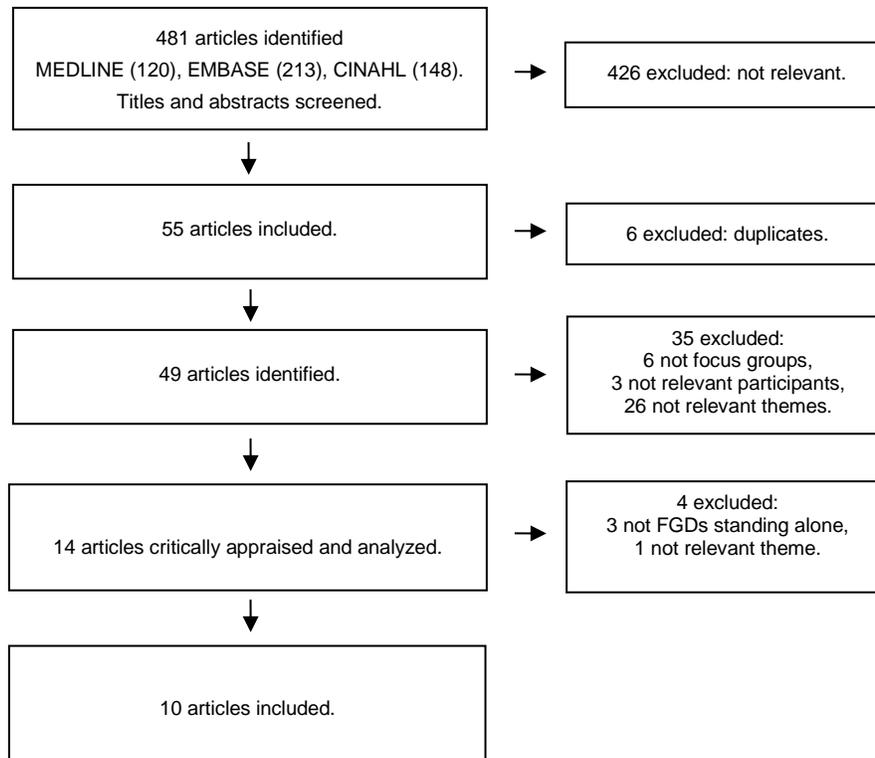


Figure 1. Selection of articles.

Analysis

Analysis of the selected articles occurred in four stages. First, all ten articles were read by the first three authors of this article who independently assessed their methodological quality using the criteria developed by Malterud (2001). The authors evaluated: the aim of the study, reflexivity, method and design, data collection, theoretical framework, methods of analysis, findings, discussion, presentation, and references. Using these criteria and the EPICURE agenda, which suggests that the criteria should not be used technically but that the evaluators are free to bring in new items if required (Stige, Malterud, & Midtgarden, 2009), the methodological quality of the ten articles was assessed in general terms. This was done to see if articles of a generally higher methodological quality were also more likely to take into account situational factors.

Thereafter, in the second stage, the articles were re-read: we counted every time explicit mention was made of the six situational factors identified by Vicsek (see Table 1) and noted whether these were discussed in the “method,” “results,” and “discussion” sections of the articles. At this stage of the analysis, no evaluation of these issues was undertaken. Third, we analyzed the meaning of the text in each of the articles in the three selected sections. Our analysis included findings related both explicitly and implicitly to the six factors in Vicsek’s analytical framework, and these findings were labeled first, second, and third levels of codes, in line with King, Carroll, Newton, and Dornan (2002). Additionally, contextual factors of relevance across and beyond Vicsek’s framework were identified, when these had potential methodological relevance to the FGDs.

The article texts were then analyzed using a combination of a template analysis and a qualitative content analysis (Graneheim & Lundman, 2004; Polit & Beck, 2006) which condensed the text in a six-step process that preserved the core content. The process was as follows: (1) words and sentences expressing a central meaning (meaning units) were identified in every article; (2) data were condensed systematically without changing the original meaning; (3) the condensed units of meaning were labeled with a code stating their content; (4) subcategories of situational factors were then created using code groups; (5) these subcategories were thereafter sorted according to the six key groupings recognized by Vicsek; and (6) any units of meaning with relevance across and beyond the themes proposed by Vicsek were then grouped into further themes.

Trustworthiness

During the process of analysis, efforts were made to strengthen the trustworthiness of our research. All four authors, for example, discussed the search strategy used for finding articles, and all of the original 481 abstracts identified were read independently by two of the authors. Thereafter, the results were compared and the 49 articles were found to be relevant to the study. Full text versions were then read by the same people who had independently conducted the initial analysis. Throughout the analysis, all four authors of this article discussed the results on an ongoing basis. To further enhance the rigor of our research, we produced a detailed decision trail in which we provided clear and mutually-agreed data related to the process of analysis and documentation (Clarke, 1999; Selamat & Hashim, 2008; Whitehead, 2004) for each of the analytical steps. These findings and interpretations were discussed with senior researchers and doctoral students at seminars. In the final stage of analysis, we reviewed how the situational factors identified could have influenced the trustworthiness of the articles.

Results

Findings of the analysis are presented here using the six categories defined by Vicsek, and additional ones, labelled as three emerging, integrative themes. In this stage, we examined each of these factors based on material within the method, results, and discussion sections of the articles selected. Situational factors were mentioned or described 77 times in the method, results, and discussion sections of the articles we analyzed, as summarized in Table 2. Fifty-one occurrences were noted in the method sections of these articles, nine in the results sections, and 17 in the discussion sections. Descriptions of situational factors within each article occurred between five and 13 times (see Table 2).

Table 2

Presence of Situational Factors in the Method, Results, and Discussion Sections of Each Article

Articles	Situational factors																		Total number of factors in each article
	Interactional factors			Characteristics of the participants			The moderator			The environment			Time factors			Content			
	M	R	D	M	R	D	M	R	D	M	R	D	M	R	D	M	R	D	
Benoit et al. (2007)				.		.	.								.			.	5
Blomberg & Sahlberg-Blom (2007)	.		.	.			.		.	.					.			.	8
Grbich et al. (2008)		.	.	.		.	.		.	.					.			.	9
Kälvemark et al. (2004)	.	.		.	.		.						.	.				.	8
Morgan & Moffatt (2008)	.	.		.		.	.			.					.			.	8
Raczka (2005)			.	.			.			.					.			.	6
Somer et al. (2004)	.	.	.	.	.	.	.	.		.			.	.		.	.		13
Thomas et al. (2004)				.	.	.	.			.					.			.	7
Watmough et al. (2006)		.		.						.					.			.	5
Öhman et al. (2005)			.	.		.	.			.			.	.				.	8
Total number of each factor in the method, results, and discussion sections.	4	5	5	10	3	6	9	1	2	8	0	3	10	0	1	10	0	0	77

Note. Presence of situational factors (•) in each of the ten articles.

To see if articles of a generally high quality were more likely to take into account situational factors, an assessment of their methodological quality was done in line with the specific criteria developed by Malterud (2001). The quality of the articles varied, and three were judged to be of a generally high quality, namely those by Källemark et al. (2004), Somer et al. (2004), and Öhman et al. (2005). Five were considered to be of a generally medium quality: Benoit et al. (2007), Blomberg & Sahlberg-Blom (2007), Grbich et al. (2008), Morgan & Moffatt (2008), and Thomas et al. (2004). The methodological quality of two articles was generally judged to be somewhat below medium, namely those by Raczka (2005) and Watmough et al. (2006). With other criteria, the assessment of these articles could have been done differently. In general, the connection between the methodological quality of the articles and the frequency of situational factors seemed to be influential.

The three articles rated as being of generally high methodological quality seemed to have more frequent and thorough descriptions of situational factors than the other articles we analyzed. For example, the article by Somer et al. (2004), which had rich data descriptions, also mentioned a lot of situational factors. Nevertheless, even the articles that were ranked as somewhat below medium included data related to situational factors and this, we contend, helped to enrich the overall quality of their findings. This was the case in the article by Raczka (2005), where the value of the data was strengthened by the inclusion of descriptions related to how the focus group sessions were arranged in settings familiar to group members and therefore constituted a safer setting for participants to share personal information. Similarly, Watmough et al. (2006) observed that the notes about group dynamics and influence taken by researchers during the sessions were incorporated in the analysis of transcripts and thus helped to strengthen the data quality. A summary of the review findings is presented in Table 3.

Table 3

Situational Factors with Subcategories and Examples of Codes that Emerged from the Qualitative Analysis

Situational factors (first level codes)	Subcategories (second level codes)	Condensed meaning units (third level codes)
Interactional factors	Atmosphere	Frankness, empathy, sharing and support, silence, reflection
	Power	Tension, dominance, influence, distress, individual ideas, disagreement
	Researcher's dominance within the group setting	Questioning, recording, monitoring, note taking
Personal characteristics of the participants	Social and demographic background	Age, gender, religion, ethnicity, material status, part of a society
	Professional background	Profession, graduation, experience, full/part-time, time with patients, relationships with clients
	Categorization of groups	Sampling, recruiting, participation voluntariness, exclusion, anonymity, confidentiality, group size
	Processes in the FGDs	Stress, compassion fatigue, relations, conflicts, emotions, crying
The moderator	Roles of the moderator and co-moderator	Introductory and supportive
	The credibility of the moderator	Detached and professional
	The moderator's techniques	Prompts for further questions, stimulation of discussion
The environment	Setting	Workplace
	Disturbances	Undisturbed and uninterrupted
	Limitations	Number of professions in FGDs, number of FGDs for each group
Time factors	Duration	Interviews lasted about two hours, time of day
Content	Quality of interview guide	Open-ended questions that allowed for flexibility
* <i>Emerging, integrative themes:</i>		
<ul style="list-style-type: none"> • <i>Psychological safety (familiar setting, hesitation, psychological detachment)</i> • <i>Ethical issues (informed and voluntary participation, consent, dilemmas, difficult situations)</i> • <i>Organizational issues (constraints, support from the employer or the organization, lack of support)</i> 		

Note. * Developed during the qualitative analysis based on contextual data that could not be categorized using the original analytical framework.

How Were Situational Factors Expressed?

Our qualitative analysis indicated that in the ten articles selected, situational factors were most frequently referred to in the method sections. In the results and discussion sections of the articles, limited mention or detail of such factors was made. The influence of such factors was seldom analyzed or discussed in the results sections of the articles. None of the ten articles explicitly used the *concept* of situational factors, but some articles partially mentioned contextual *phenomena*, which were similar to situational factors, and discussed the impact that these had on the generation and quality of data (see Table 3).

Two of the six situational factors identified by Vicsek, namely interactional factors and the personal characteristics of the participants, were most frequently expressed and discussed in the method, results, and discussion sections of the articles. Our qualitative analysis showed that most of the factors identified during the qualitative analysis could be categorized using Vicsek's framework of factor analysis (see Table 3). However, three emerging, integrative themes were added, namely psychological safety, ethical issues, and organizational information, because certain material identified did not fit within Vicsek's original scheme. Below we discuss each of these situational factors in turn.

Interactional factors.

The qualitative analysis revealed that the units of meaning associated with interactional factors could be summarized, condensed, and organized into three subcategories: atmosphere, power, and the researcher's dominance within the group settings. These interactional factors were mentioned and described in the articles with almost the same frequency in all of the three sections we analyzed. In the articles by Källemark et al. (2004), Somer et al. (2004), and Morgan & Moffatt (2008), for example, group dynamics were highlighted in the method sections and viewed as essential to highlighting key issues within the FGD processes. Issues in the method sections of the articles included the moderator's use of focusing exercises to challenge the assumptions of the group members, and their ability to focus attention and return the group to the research topic under discussion. Preventing power imbalances and tensions was important, as was the facilitation and expression of personal views, and the articles emphasized the significance of establishing a warm, free, and open atmosphere in the FGD process.

In the results section of the article by Grbich et al. (2008), the researchers observed how disagreements among group members are sometimes evident in FGDs and often difficult to separate from concerns related to the actual research being undertaken. In their article, the researchers noted that the disagreements related to the research issue itself—namely, how to include research in a care service culture, a topic that was already a source of contention between hospice staff and senior administrators. Morgan & Moffatt (2008), in their study of the experiences of four community nursing teams, reflected on how focus groups may also be a cathartic experience for participants, by helping them to cope with difficult and emotionally draining interactions with patients. Somer et al. (2004) also highlighted the importance of FGDs, particularly in terms of their potentially positive group dynamics and the opportunities they provide for frankness, empathy, sharing, and support, as well as for silence and reflection. Similarly, the notes taken by Watmough et al. (2006) during FGDs reflected on the importance of group interactions. Källemark et al. (2004), too, noted that interests, values, and hierarchies associated with the professional relations of the participants also impacted on the findings of the FGDs. These findings of interactional aspects can be inherent in FGDs, but also be results of such groups.

In the descriptions of interactional factors in the discussion sections of the articles by Blomberg & Sahlberg-Blom (2007) and Somer et al. (2004), the researchers noted how mutual involvement by the group members can stimulate reflection on the topic discussed. They noted, too, how negative professional, work, or power relationships may equally impact upon the free expression of ideas. Grbich et al. (2008) observed that opinions may change during the different stages of a FGD and that participant responses may shift from being initially adversarial to ultimately supportive. In this regard, Öhman et al. (2005) noted how, in the course of the FGDs, the researcher's dominance changed from being seen as a potential threat to the success of the discussion to being a minor problem.

Personal characteristics of the participants.

We identified four subcategories in the units of meaning in our qualitative analysis of personal characteristics. These were: the social and demographic background of the participants, their professional background, the categorization of the different focus groups, and the processes in the FGDs. In all the articles we analyzed, the participants had been categorized according to factors such as their social and professional backgrounds in the method sections. Benoit et al. (2007) and Öhman et al. (2005), for instance, mentioned the age and gender of the participants, and Källemark et al. (2004) noted their occupational background. Raczka (2005), Blomberg & Sahlberg-Blom (2007), and Thomas et al. (2004) identified the significance of participants having similar backgrounds, arguing that this was a useful way to achieve mutual understanding. Similarly, Morgan & Moffatt (2008) recommended the use of pre-existing, organized groups to facilitate access to “naturally occurring” data—in this case data from the social context in which ideas are generated and used to inform real, clinical decisions. Four of the articles—Somers et al. (2004), Watmough et al. (2006), Öhman et al. (2005), and Thomas et al. (2004)—highlighted methodological and ethical considerations related to informed voluntary participation, consent, and anonymity. Grbich et al. (2008) used already-established staff groups to define the focus group within their study and to reflect on the high number of original participants who also took part in the later rounds of multistage FGDs.

In the results sections of the articles by Källemark et al. (2004), Somers et al. (2004), and Thomas et al. (2004), the researchers described the challenges that health professionals encounter in trying to remain detached in the face of traumatic events, especially when such events involve clients from their own community. These articles also described how processes in FGDs could accentuate conflicts linked to existing professional hierarchies or differences in viewpoints, for example issues related to ways to respect patient integrity. The discussion sections of these articles raised concerns related to issues such as the social construction of participant attitudes, the significance of emotions, and the reluctance of young or inexperienced group members to comment in front of more experienced colleagues in the same focus group or collaborate with them (Benoit et al., 2007; Morgan & Moffatt, 2008; Somers et al., 2004; Thomas et al., 2004). Issues related to group size and the potential for participants to withdraw during FGDs were raised by Grbich et al. (2008) and Öhman et al. (2005).

The moderator.

Findings related to the moderators in FGDs were condensed and organized into three subcategories: the roles of moderators and assistant moderators, their credibility, and their techniques (including their use of prompts to stimulate discussion and conversation). The articles emphasized the importance of the role of moderators and co-moderators in enabling continuous discussion and activities during FGDs. The moderator, sometimes referred to as the “facilitator,” was described in the method sections of all the articles, with the exception of Watmough et al. (2006), but scarcely mentioned in the results and discussion sections. In the article by Blomberg & Sahlberg-Blom (2007), the role of the moderator was mentioned as being important in terms of how introductory questions were posed and presented, and in terms of their role in stimulating all group members to engage in continued discussion and activity. Some articles, such as Benoit et al. (2007), noted that the role of a co-moderator, also referred to as an “assistant” in this instance, was to take notes and partake in the actual FGDs as needed. The researchers reflected on the methodological processes involved and how questions might be posed by co-moderators within the FGDs. The results section of the Somers et al. (2004) article described how the moderator, as a member of the group, needed to be aware of the overall group atmosphere and respond accordingly. This was illustrated with descriptions of how a focus group became silent for long

periods of time when participants were asked to reflect on instances requiring the notification of the death of a loved one who had been a member of their own community. In the discussion section of the article by Blomberg & Sahlberg-Blom (2007), the researchers noted that the behavior of a moderator can influence a group if they use open-ended questions, while Grbich et al. (2008) referred to the impact that a facilitator's ability can have on the ability of people to respond to concerns identified, as well as on the facilitator's ability to remain objective and dispassionate.

The environment.

We condensed and categorized situational data related to the environment (including physical and social factors) into three subcategories: the setting, disturbances, and limitations (e.g., number of professions in each focus group and number of group sessions). Environmental factors were mentioned in the method sections of all the articles except two, Benoit et al. (2007) and Källemark et al. (2004), although in the latter article environmental issues were mentioned within the discussion section. Somer et al. (2004) raised environmental issues in their method and discussion sections, but Öhman et al. (2005) only included such issues in the discussion section of their article. Environmental factors were not mentioned in the results sections of any of the articles. None of the articles elaborated on the potential influence of environmental factors on the research processes or on the type and quality of actual data. All but one article described FGDs that had been conducted in workplace settings, but in this instance they did not reflect on the advantages or disadvantages of such settings.

The articles also highlighted efforts to keep the FGD process undisturbed and uninterrupted, a challenge that some researchers found difficult when operating within busy working environments. Morgan & Moffatt (2008) reported that the FGDs they analyzed took place during a lunch hour, while Grbich et al. (2008) noted that the FGDs they assessed were held outside standard working hours and that the participants were economically compensated for their participation. Blomberg & Sahlberg-Blom (2007) observed that work-related disturbances were not permitted during the FGDs they reported on, while Raczka (2005) recommended that FGDs should be held in settings that are familiar to group members. Somer et al. (2004) also identified examples of potential environmental limitations that may have compromised the richness of their data. These included FGDs in which the participants were all from the same profession and in which only a single group session was conducted.

Time factors.

Qualitative units of meaning related to the issue of time were seldom described. We therefore summarized and condensed this material into just one subcategory: the duration of the FGDs. In most articles, the issue of the duration of the FGDs was mentioned in the method sections, and although Somer et al. (2004) included time-related issues in the discussion section of their article, no other articles mentioned this in their results sections. While the issue of the duration of the group discussions was mentioned in this article, the consequences for the quality of data collection were not explored further. Each of the FGDs in the articles we analyzed lasted between one and two hours, and was typically between 60 and 90 minutes in length. In the article by Grbich et al. (2008), a multistage focus groups approach was described, and they ran for a period of three years.

Content.

Issues related to the content of the FGDs were briefly described in the method sections of the articles we analyzed. In the interpretive phase of our research, we condensed and summarized units of meaning into one subcategory only: the quality of the interview guide used. Blomberg & Sahlberg-Blom (2007), Kälvemark et al. (2004), Raczka (2005), Thomas et al. (2004), and Öhman et al. (2005) included material related to the interview guides and FGD questions in the method sections of their articles. Somer et al. (2004) described the use of a written topic guide that was provided in advance and specified ten open-ended questions that could be used to both direct the FGD and allow flexibility within the focus group interactions at the same time. Similarly, Watmough et al. (2006) reported how the FGD presented in their article involved pre-selected topics. Benoit et al. (2007) reported how the FGDs in their study began with participants completing a demographic questionnaire. Other researchers emphasized the uniqueness of the research issue and its significance for the result of FGDs.

Findings Beyond and Across the Analysis Scheme: Emerging Integrative Themes

As noted earlier, the qualitative analysis of the unit categorizations revealed that not all the material reported in the reviewed articles could be contained within Vicsek's framework of six key situational factors. Some articles referred to situations of hesitation and psychological detachment among focus group members (Morgan & Moffatt, 2008; Thomas et al., 2004), which indicate a lack of perceived psychological safety by the members exhibiting these behaviors, and Raczka (2005) emphasized the importance of providing a safe setting for participants to share personal information. Somer et al. (2004) described how the moderator, as a member of the group, needed to be aware of the overall group atmosphere and respond accordingly. A few articles referred to ethical issues, such as the need to manage sensitive situations or emotional reactions within the FGD groups (Somer et al., 2004) or the right of participants to withdraw (Blomberg & Sahlberg-Blom, 2007). Blomberg & Sahlberg-Blom (2007) noted that organizational issues may also influence the results from the FGDs: health organizations or employers may, for example, support health professionals in their handling of stressful situations, and such information may influence not only the group processes involved in the FGDs but also the need for a more contextualized analysis of such results. Similarly, when institutional constraints intensify distress related to ethical concerns, the absence of debate or organizational support in the workplace may undermine the ability of people to cope with such dilemmas (Kälvemark et al., 2004).

Data and details such as these, as we have suggested, could not be classified within the categories specified in Vicsek's framework. We therefore summarized and condensed this material into three themes: psychological safety, ethical issues, and organizational information. Psychological safety of the group members may be regarded as an interactional factor. Interactional factors, however, seems to be a vague and, at the same time, too comprehensive term. Because these contextual factors differed from Vicsek's scheme, they have been reported as emerging and integrative themes (see Table 3).

Discussion

What Do Situational Factors Add to the Analysis of Focus Group Results?

Our analysis indicated that a comprehensive review of situational factors, together with detailed descriptions of specific situational factors, helps to generate more specific analytical detail and increases the depth of the reported findings. This is because a discussion of these issues helps to

elucidate the context and contributes to more comprehensive detail and better insight. Furthermore, analysis of data excerpts from the group process helps to broaden the focus of data analysis and strengthen its impact and communicative validity (Duggleby, 2005; Kvale & Brinkmann, 2009; Wilkinson, 1998). Three of the articles analyzed in this study, namely Blomberg & Sahlberg-Blom (2007), Källemark et al. (2004), and Somer et al. (2004), described situational factors in detail. Conversely, Watmough et al. (2006) included few descriptive details of the situational factors in their article, which as a result weakened the potential for contextualization.

Our study has shown that of all the situational factors analyzed, the characteristics of participants and the role of moderators are especially important. These factors we therefore contend should be explicitly considered within research studies in order to increase the trustworthiness of the research and the quality of findings. Our analysis indicated that although most of the ten articles in our study failed to consider the role of moderators in FGDs, their role may strongly influence research findings and outcomes and should therefore be analyzed in depth. Blomberg & Sahlberg-Blom (2007) discussed the role of moderators in group processes (including, for example, their role in encouraging participants to take part in the discussion), and in terms of how moderators influence data generation and validation. Morgan & Moffatt (2008) described how the tapes from the FGDs were compared with written notes taken by co-moderators in order to validate the findings. No article mentioned or discussed how the personal characteristics or gender of the moderators influenced the FGDs.

An assessment of social processes also needs to be an integral and significant part of data analysis. Pressure within groups to conform, for instance, may result in participants modifying their opinions in order to minimize the potential for conflict (Asch, 1951). Significantly, such modifying effects on individual behavior were scarcely described in the articles we analyzed. Being moderators ourselves, we recognize the important role of establishing a safe group atmosphere that allows for potential disagreement. In our professional capacity, for example, we have observed how participants may sometimes prefer to hold back from expressing their individual opinions in order to achieve consensus, even though this may not necessarily be the desired aim of a FGD. In other situations we have observed that participants have tried to minimize disagreements between focus group participants or have failed to evaluate differing opinions adequately. This is also a reason for accentuating psychological safety of group members as an emerging theme beyond the analysis scheme.

To better capture even more thoroughly a phenomenon like psychological safety, the term *groupthink* described by MacDougall (1997) in relation to focus group methodology should be included in the platform of an analysis scheme. Groupthink occurs within FGDs especially when group members try to reach consensus or make a decision without critical evaluation of viewpoints or when group members minimize conflicts. The phenomenon of groupthink is therefore in line with the constructivist and social psychological platform of the scheme.

Aspects of Trustworthiness and Quality

Our research indicated that the presence of an analysis or discussion of situational factors within an article may be a useful indicator of methodological quality. All three articles rated as high overall in terms of their methodological quality included a description of a significant number of situational factors, and in all of them, such issues were discussed in the three sections we analyzed. That was also the case of the overall medium-rated articles by Grbich et al. (2008) and by Thomas et al. (2004). In general, there seems to be an association between the level of situational detail in an article and its methodological quality. A thorough description of the

analytical context facilitates an interpretation of the meaning and significance of the research (Denzin & Lincoln, 1998; Hoddinott & Pill, 1997). Conversely, the absence of contextual factors within an analysis may be seen to weaken the validity of the research (Vicsek, 2007, 2010; Waterton & Wynne, 1999). In keeping with an analytical constructivist approach in which social interactions and context are emphasized, the methodological aspects of FGDs should be articulated and elucidated (Fern, 1982; Twohig & Putnam, 2002). By providing richer data, an analysis of situational factors can strengthen the trustworthiness, credibility, dependability, transferability, and confirmability of research (Lincoln & Guba, 1985; Porter, 2007; Rolfe, 2006).

The credibility and dependability of research analysis, we contend, can also be strengthened when details related to situational factors are woven together with participant statements and contextualized transcriptions and quotations. However, an analysis of FGD contexts recorded through detail at an individual level and using selected personal statements will also need to be complemented with a broader analysis of the group as a whole (Vicsek, 2007, 2010). A broader analysis could include, for example, data from FGDs related to interactions *between* members which may otherwise have been underreported (Duggleby, 2005; Wilkinson, 1998). The transferability of research is further strengthened when situational factors that contextualize the findings are offered at a level of detail that facilitates their application in other settings, as done by Somer et al. (2004). The likelihood of confirmability is increased when the analysis and interpretation of the data is strongly rooted in contextual data. In the articles by Blomberg & Sahlberg-Blom (2007), Källemark et al. (2004), and Morgan & Moffatt (2008), for example, excerpts from the group processes were reported, thus explicitly informing readers about the interactional sequences, which strengthens the trustworthiness of the research findings.

Experiences with the Use of a Template Analysis Scheme

In a qualitative content analysis, the categories used should be exhaustive, mutually exclusive, and not overlap (Graneheim & Lundman, 2004). In our qualitative analysis of data categorization, the interactional factors and personal characteristics of the participants were found to overlap partially, although the majority of our findings could be included specifically within one of the six key situational factors proposed by Vicsek. In our study, we extended the categories of recognized situational factors with three emerging, integrative themes (see Table 3). According to King et al. (2002), integrative themes serve an important purpose in enabling a more holistic analysis to be produced than might otherwise be possible with a template approach. We contend that these additional themes should be regarded as supplementary methodological elements of future FGD analysis, to enrich the analytical focus of investigations and thereby the data generated and evaluated. The three themes should be incorporated in the further improvement of frameworks for understanding situational factors, such as those used by Vicsek or other template analytical approaches (King, 2004; Polit & Beck, 2006).

Methodological and Epistemological Reflections

Methods for synthesis of qualitative studies are still being developed, while systematic reviews based on quantitative studies allow for reanalysis of aggregated or individual quantitative data and the methods are more standardized. We chose a comprehensive search strategy where we attempted to identify all studies, but we might not have identified all available studies because subject headings and study design filters are still under development. We experienced that the studies included last did not add much extra to the findings and felt we had reached saturation.

The overall methodological quality of the ten articles was judged by means of the specific criteria by Malterud (2001). Such a criteria-based evaluation may be defensible only if the evaluated

studies are based on a corresponding epistemological foundation (Stige et al., 2009) and when the researchers bore the criteria in mind when conducting and reporting their studies. With more overall standards like the EPICURE agenda, the assessment of these articles could have been done differently. Because we did not use the assessment to exclude studies, but to get a thorough knowledge, we found the assessment tool helpful.

The purpose of this review was to extend knowledge regarding factors which might contribute to understanding findings as well as increase transferability by revealing more about the research context. We chose Vicsek's scheme for situational factors as a starting point and combined a template analysis and a content analysis to interpret the data from the included studies. The template approach is flexible and can be adapted to the needs of a study, but the coding template may also be too complex to be manageable or too simple to allow for a depth of interpretation (King, 2004). The template analysis scheme may have narrowed our scope in search of contextual data, but we experienced that using such an incremental analysis style illustrated the value of an open and flexible approach towards understanding and analyzing the complex phenomenon of contextual factors.

Situational factors – a sensitizing concept.

In the analytical framework proposed by Twohig & Putnam (2002), situational factors are also recognized as potential influences upon the results and data generated through FGDs. According to Twohig and Putnam (2002), these factors include: recruitment processes, inclusion and exclusion criteria, the specification of the number and range of groups, a description of participants, the participation rate, the role of researchers, the length of the sessions, and the settings of the FGDs. Like Vicsek's conceptual approach, Twohig & Putnam's framework may also be used as a tool to facilitate the incorporation of deeper contextual and methodological dimensions into research and analysis, and as a way to validate focus group results. Conversely, more sensitizing, open approaches allow researchers to focus on what the full implications of the various situational factors might be, rather than allowing them to focus only on the actual content of situational factors. This implies that they should be able to seek to examine their *latent* meaning rather than only their *manifest* meaning and reflect on the impacts they may have that might otherwise not be fully recognized. A broader and more flexible approach, as our research has highlighted, helps to capture greater relevant contextual data, thus providing sufficient detail for the rigorous critical appraisal of FGDs.

Epistemological reflections.

Qualitative data are influenced by how people make sense of experiences within the research contexts (Denzin & Lincoln, 1998). From a constructivist viewpoint, data cannot be seen as separate from the context in which they are found; instead, data are created in – and through – the processes involved in making meaning (Kvale & Brinkmann, 2009). Different levels of research contextualization were undertaken in our study: first, in the analysis of the participants' perceptions within FGDs by the original researchers of each of the articles (as they made sense of the participant responses), then by the original authors' descriptions and analysis of their research findings, and finally, by our own interpretations of the articles and the findings they described. Our identification and interpretation of the situational factors noted in the articles is therefore based on data already interpreted before. Giddens (1984, 1993) contends that a double hermeneutic exists between different levels of interpretation: a mutual two-way process of interpretation in which each interpretation influences the other. Such processes occur, for example, when researchers attempt to describe the participants' frames of meaning and references, and again when the researchers use category descriptions to interpret the data using

frames of meaning (Gilje & Grimen, 1995). Thus, when we categorized the contextual and methodological data from each of the articles into specific situational factors, our interpretation represented an additional dimension of interpretation and established, therefore, a relationship between interpretation and meaning. We contend that this stage of interpretation may significantly influence the processes of categorization, analysis, and refinement of contextual factors which, in turn, helps to improve the trustworthiness of *our own* findings.

Aspects of the double hermeneutic have important implications for research. In our analysis, we found it useful to focus on one specific field and to include all the articles within this field that fulfilled the inclusion criteria. Nevertheless, our specific focus of analysis on workplace health, stress, and coping, and our backgrounds as health service researchers and health professionals, may have influenced our inclusion as well as interpretation of the data recorded. This constraint may also limit the transferability of our findings. In our case, a broader approach, for example, might mean that the number of included articles would need to be larger. If more articles were included, however, qualitative analysis might be more challenging or difficult to undertake.

Vicsek's analytical framework was used as the foundation for building a critical, evaluative framework that allowed for an application of a mixed methods research design, with a mainly qualitative approach and quantitative elements incorporated. Our focus on workplace health, stress, and coping among health professionals as inclusion criteria was narrow in scope and this made it possible to apply an in-depth analytical framework for qualitatively assessing the ten studies we selected. Complementary research competencies and experiences among the four authors of this article helped with the interpretation of the studies and to strengthen the validity of the research, especially the communicative validity between the researchers involved and, in a broader sense, between us and those who will, in turn, use our own research.

Conclusion and Implications

FGD is a valuable method for gathering data concerning personal experiences and social phenomena. The recognition and reporting of the contextual factors that impact upon FGDs and how these influence the research process help to establish more transparent research processes that are grounded in contextual data. Descriptions of situational factors within research also help to enhance the trustworthiness of studies, by helping people to decide whether the findings are transferable to other settings. As we have noted, the degree to which contextual factors are described within articles may be an indication of their overall methodological quality. The inclusion of details related to contextual factors necessarily requires additional methodological rigor at all stages of the research process. Vicsek's analytical framework, as we have indicated, is useful during the research process and can be applied in research from the beginning stage of focus group design all the way through to a discussion of research findings. In addition, situational factors may also be considered as a sensitizing concept and phenomenon, open to capturing contextual and methodological aspects of FGDs beyond a specific scheme. Whichever approach is used, situational factors should be viewed holistically and as significant throughout the method, results, and discussion sections. Future research should focus on clear reporting of contextual factors as well as further develop Vicsek's model to enhance reporting accuracy and transferability.

References

- Asbury, J. E. (1995). Overview of focus group research. *Qualitative Health Research*, 5(4), 414–420.
- Asch, S. E. (1951). Effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership and men* (pp. 177–190). Pittsburgh, PA: Carnegie.
- Barbour, R. (2007). *Doing focus groups*. London, United Kingdom: Sage.
- Benoit, L. G., Veach, P. M., & LeRoy, B. S. (2007). When you care enough to do your very best: Genetic counselor experiences of compassion fatigue. *Journal of Genetic Counseling*, 16(3), 299–312.
- Berland, A., Natvig, G. K., & Gundersen, D. (2008). Patient safety and job-related stress: A focus group study. *Intensive and Critical Care Nursing*, 24(2), 90–97.
- Blomberg, K., & Sahlberg-Blom, E. (2007). Closeness and distance: A way of handling difficult situations in daily care. *Journal of Clinical Nursing*, 16(2), 244–254.
- Blumer, H. (1954). What is wrong with social theory? *American Sociological Review*, 19, 3–10.
- Blythe, J., Baumann, A., & Giovannetti, P. (2001). Nurses' experiences of restructuring in three Ontario hospitals. *Journal of Nursing Scholarship*, 33(1), 61–68.
- Clarke, J. B. (1999). Hermeneutic analysis: A qualitative decision trail. *International Journal of Nursing Studies*, 36(5), 363–369.
- Crabtree, B. F., & Miller, W. L. (1999). Using codes and code manuals: A template organizing style of interpretation. In B. F. Crabtree & W. L. Miller (Eds.), *Doing qualitative research* (2nd ed., pp. 163–177). Thousand Oaks, CA: Sage.
- Denzin, N. K., & Lincoln, Y. S. (1998). *Collecting and interpreting qualitative materials*. Thousand Oaks, CA: Sage.
- Duggleby, W. (2005). What about focus group interaction data? *Qualitative Health Research*, 15(6), 832–840.
- Fern, E. F. (1982). The use of focus groups for idea generation: The effects of group size, acquaintanceship, and moderator on response quantity and quality. *Journal of Marketing Research*, 19, 1–13.
- Fern, E. F. (2001). *Advanced focus group research*. Thousand Oaks, CA: Sage.
- Freeman, T. (2006). “Best practice” in focus group research: Making sense of different views. *Journal of Advanced Nursing*, 56(5), 491–497.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley, CA: University of California Press.

- Giddens, A. (1993). *New rules of sociological method: A positive critique of interpretative sociologies*. (2nd ed). Cambridge, United Kingdom: Polity press.
- Gilje, N., & Grimen, H. (1995). *Samfunnsvitenskapenes forutsetninger* [The Premises of Social Sciences] (2nd ed.). Oslo, Norway: Universitetsforlaget.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112.
- Grbich, C., Abernethy, A. P., Shelby-James, T., Fazekas, B., & Currow, D. C. (2008). Creating a research culture in a palliative care service environment: A qualitative study of the evolution of staff attitudes to research during a large longitudinal controlled trial. *Journal of Palliative Care*, 24(2), 100–109.
- Grim, B. J., Harmon, A. H., & Gromis, J. C. (2006). Focused group interviews as an innovative Quanti-Qualitative Methodology (QQM): Integrating quantitative elements into a qualitative methodology. *The Qualitative Report*, 11(3), 516–537.
- Hart, C. (1998). *Doing a literature review: Releasing the social science research imagination*. London, United Kingdom: Sage.
- Hoddinott, P., & Pill, R. (1997). Qualitative research interviewing by general practitioners: A personal view of the opportunities and the pitfalls. *Family Practice*, 14(4), 307–312.
- Hollander, J. A. (2004). The social contexts of focus groups. *Journal of Contemporary Ethnography*, 33(5), 602–637.
- Källemark, S., Höglund, A. T., Hansson, M. G., Westerholm, P., & Arnetz, B. (2004). Living with conflicts: Ethical dilemmas and moral distress in the health care system. *Social Science & Medicine*, 58(6), 1075–1084.
- King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 256–270). London, United Kingdom: Sage.
- King, N., Carroll, C., Newton, P., & Dornan, T. (2002). “You can’t cure it so you have to endure it”: The experience of adaptation to diabetic renal disease. *Qualitative Health Research*, 12(3), 329–346.
- Kitzinger, J. (1994). The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health & Illness*, 16(1), 103–121.
- Kvale, S., & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing*. Los Angeles, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. London, United Kingdom: Sage.

- MacDougall, C. (1997). The devil's advocate: A strategy to avoid groupthink and stimulate discussion in focus groups. *Qualitative Health Research*, 7(4), 532–541.
- Malterud, K. (2001). Qualitative research: Standards, challenges, and guidelines. *The Lancet*, 358(9280), 483–488.
- Melnyk, B. M., & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing & healthcare: A guide to best practice* (2nd ed.). Philadelphia, PA: Wolters Kluwer.
- Morgan, D. L., & Krueger, R. A. (1998). *The focus group kit*. Thousand Oaks, CA: Sage.
- Morgan, P. A., & Moffatt, C. J. (2008). Non healing leg ulcers and the nurse-patient relationship. Part 2: The nurse's perspective. *International Wound Journal*, 5(2), 332–339.
- Morse, J. (2003). Principles of mixed-and multi-method research design. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 189–208). Thousand Oaks, CA: Sage.
- Öhman, A., Hegg, K., & Dahlgren, L. (2005). A stimulating, practice-based job facing increased stress: Clinical supervisors' perceptions of professional role, physiotherapy education and the status of the profession. *Advances in Physiotherapy*, 7(3), 114–122.
- Polit, D. F., & Beck, C. T. (2006). *Essentials of nursing research: Methods, appraisal, and utilization* (6th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Porter, S. (2007). Validity, trustworthiness and rigour: Reasserting realism in qualitative research. *Journal of Advanced Nursing*, 60(1), 79–86.
- Raczka, R. (2005). A focus group enquiry into stress experienced by staff working with people with challenging behaviours. *Journal of Intellectual Disabilities*, 9(2), 167–177.
- Reed, J., & Payton, V. R. (1997). Focus groups: Issues of analysis and interpretation. *Journal of Advanced Nursing*, 26(4), 765–771.
- Rolfe, G. (2006). Validity, trustworthiness and rigour: Quality and the idea of qualitative research. *Journal of Advanced Nursing*, 53(3), 304–310.
- Selamat, M. H., & Hashim, A. H. (2008). A qualitative decision trail in the hermeneutic analysis: Evidence from the case study. *International Journal of Business and Management*, 3(3), 41–55.
- Sim, J. (1998). Collecting and analysing qualitative data: Issues raised by the focus group. *Journal of Advanced Nursing*, 28(2), 345–352.
- Somer, E., Buchbinder, E., Peled-Avram, M., & Ben-Yizhack, Y. (2004). The stress and coping of Israeli emergency room social workers following terrorist attacks. *Qualitative Health Research*, 14(8), 1077–1093.
- Stige, B., Malterud, K., & Midtgarden, T. (2009). Toward an agenda for evaluation of qualitative research. *Qualitative Health Research*, 19(10), 1504–1516.

- Thomas, E. J., Sherwood, G. D., Mulhollem, J. L., Sexton, J. B., & Helmreich, R. L. (2004). Working together in the neonatal intensive care unit: Provider perspectives. *Journal of Perinatology*, *24*(9), 552–559.
- Twohig, P. L., & Putnam, W. (2002). Group interviews in primary care research: Advancing the state of the art or ritualized research? *Family Practice*, *19*(3), 278–284.
- Vicsek, L. (2007). A scheme for analyzing the results of focus groups. *International Journal of Qualitative Methods*, *6*(4), 20–34.
- Vicsek, L. (2010). Issues in the analysis of focus groups: Generalisability, quantifiability, treatment of context and quotations. *The Qualitative Report*, *15*(1), 122–141.
- Waterton, C., & Wynne, B. (1999). Can focus groups access community views? In R. S. Barbour & J. Kitzinger (Eds.), *Developing focus group research* (pp. 127–143). London, United Kingdom: Sage.
- Watmough, S., Garden, A., & Taylor, D. (2006). Pre-registration house officers' views on studying under a reformed medical curriculum in the UK. *Medical Education*, *40*(9), 893–899.
- Webb, C., & Kevern, J. (2001). Focus groups as a research method: A critique of some aspects of their use in nursing research. *Journal of Advanced Nursing*, *3*(6), 798–805.
- Whitehead, L. (2004). Enhancing the quality of hermeneutic research: Decision trail. *Journal of Advanced Nursing*, *45*(5), 512–518.
- Wilkinson, S. (1998). Focus groups in health research: Exploring the meanings of health and illness. *Journal of Health Psychology*, *3*(3), 329–348.