Using Data Triangulation of Mother and Daughter Interviews to Enhance Research about Families
Roberta G. Sands and Dorit Roer-Strier
*Qualitative Social Work* 2006 5: 237
DOI: 10.1177/1473325006064260

The online version of this article can be found at:
http://qsw.sagepub.com/content/5/2/237

Published by:
SAGE
http://www.sagepublications.com

Additional services and information for *Qualitative Social Work* can be found at:

Email Alerts: http://qsw.sagepub.com/cgi/alerts

Subscriptions: http://qsw.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations: http://qsw.sagepub.com/content/5/2/237.refs.html

>> Version of Record - May 11, 2006

What is This?
Using Data Triangulation of Mother and Daughter Interviews to Enhance Research about Families

Roberta G. Sands
University of Pennsylvania, USA

Dorit Roer-Strier
The Hebrew University of Jerusalem, Israel

ABSTRACT
Qualitative researchers use the term triangulation to describe the use of multiple strategies to study the same phenomenon. Although it is endorsed in social work research textbooks and contested in the literature, qualitative social work researchers are left on their own to determine how to 'do' triangulation. This article discusses triangulation, including recent debates around the concept. It describes two methods of data triangulation and illustrates them with examples from the study of mothers and daughters coping with a daughter's religious intensification. From the first method, a comparative analysis of mother-daughter dyads, the authors identify and provide examples of five types of triangulated data: (1) same story, same meaning; (2) same story, different interpretations; (3) missing pieces; (4) unique information; and (5) illuminating. The second method, triangulation within groups and between groups, makes visible perspectives that are common and distinct to mothers and daughters.
daughters as members of different cultural groups. The article discusses the advantages of systematic data triangulation for qualitative research and draws implications for social work research and practice.

The term triangulation is used by surveyors, radio broadcasters, military strategists, and navigators to describe a trigonometric operation through which one can determine an object’s location or position by computing its bearings from two or three known points (Blakie, 1991; Hammersley and Atkinson, 1995; Lincoln and Guba, 1985; Neuman, 2000). Qualitative researchers use the same term metaphorically to describe the use of multiple strategies to study the same phenomenon (Denzin, 1989). Scholars argue that ‘looking at something from several different points gives a more accurate view of it’ (Neuman, 2000: 521), or that a combination of research approaches can produce a ‘many-sided kaleidoscope and a picture of the subject under study’ (Flick, 1992: 180). Triangulation is endorsed by both qualitative and quantitative social work research texts as a means of enhancing the rigor of social work research (e.g. Grinnell and Unrau, 2005; Neuman and Kreuger, 2003; Padgett, 1998; Rubin and Babbie, 2005; Shaw and Gould, 2002; Tutt et al., 1996). However, few scholars provide an in-depth discussion about the concept or offer specific examples and instructions for using triangulation in social work research. Our aim here is to fill in these gaps.

This article begins by discussing triangulation, including recent debates around the concept. Then it introduces the study that was the basis for our analysis of triangulated data. The article demonstrates two means of analysis of triangulated data – dyadic and group (between and within) and describes five types of data triangulation that emerged from the process of triangulating dyads. The article shows how, despite polemics to the contrary, systematic triangulation is advantageous to a study. Finally, the article discusses the implications of systematic data triangulation for qualitative data analysis and clinical social work practice.

TRIANGULATION

Denzin (1989) describes four kinds of triangulation – methodological, data, investigator, and theoretical. Methodological triangulation usually entails the use of a variety of qualitative methods to collect data, such as in-depth interviewing, participant observation, and focus groups, but it can encompass a combination of qualitative and quantitative methods (Grinnell and Unrau, 2005; Patton, 2002). With data triangulation, different data sources, within the above or other methods, are used. For example, one might triangulate transcriptions of different interviewees about the same topics, fieldnotes on observations of
the same site during different time periods or from different locations, or a newspaper report and participant observation notes on the same event. When there is investigator triangulation, two or more researchers observe and/or analyze the same phenomenon. Theoretical triangulation refers to the use of different theoretical perspectives to interpret findings. Janesick (1994: 215) described another type, interdisciplinary triangulation, which can open the researcher to discourses that are not dominant in one’s own discipline, such as those from ‘art, sociology, history, dance, architecture, and anthropology’. All five types of triangulation require that the researcher juxtapose and compare findings arrived at through different approaches.

In qualitative research, triangulation is a means of using the strengths of one method to offset the weaknesses of another (Denzin, 1989). Used together, the researcher obtains a more comprehensive picture of the phenomenon under study. For example, participant observation allows one to obtain a large amount of contextual data, a wide range of types of data and informants, and has great utility in uncovering the ‘native’s perspective’ but does not lend itself to the efficient management of data (Marshall and Rossman, 1989). The individual interview makes it possible to gather a large amount of data over a relatively short period of time but, because it is dependent on the skills of the interviewer and the willingness of the informant to be open and honest, the data may be erroneous or misleading (Marshall and Rossman, 1989). In comparison with participant observation, the focus group allows one to observe interactions and gather information on a topic over a short time frame, but in contrast with the former, focus groups ordinarily are not naturally constituted groups (Morgan, 1997). In comparison with individual interviews, focus groups provide an opportunity to collect data from many individuals at once, again over a shorter period of time; on the other hand, individual interviews impart more information than focus groups do (Morgan, 1997).

Triangulated findings have been described as convergent, complementary, or dissonant (Erzberger and Prein, 1997; Flick, 1992; Perlesz and Lindsay, 2003). Findings are convergent or congruent when the results from two or more sources of data or methods are similar. When this occurs, the findings of one substantiate the findings of the other, thus supporting the validity of the results. This occurs when, for example, two interviewees refer to the same event as a crucial turning point. In contrast, complementary findings are those in which different parts are combined so as to create ‘a more complete picture’ of the whole (Erzberger and Prein, 1997: 144). Accordingly, findings obtained one way are partial and cannot be understood until they are juxtaposed with those obtained through another means. For example, when two participant observers of the same event who sit in different sides of the room combine their observations they are able to obtain a fuller, more integrated understanding of the event. Another possibility is dissonance or ‘unexplainable divergences’ (1997: 147).
This occurs when findings produced by two or more methods or data sources are incompatible and challenge expectations. For example, the findings that someone is ‘healthy’ and ‘gravely sick’ are dissonant. In cases like this, the researcher is advised to explore whether the methods used were responsible for producing different results or whether changes need to be made in the theoretical formulation to accommodate the divergences (1997). In the example given, the concepts of illness and disease can be used respectively to explain someone’s perceived health in contrast to the biological process of sickness (Kleinman, 1988).

Triangulation has been regarded as a means of achieving validity and is sometimes used by investigators using quantitative or mixed methods to demonstrate that the findings are corroborated (e.g. Kopinak, 1999). Because the term ‘validity’ is based on a positivistic model, in which reality is assumed to be ‘tangible’, ‘out there’, and ‘fragmentable into independent variables and processes’ (Lincoln and Guba, 1985: 37), questions have been raised about the goodness of fit between triangulation and qualitative research that is based on constructivist, interpretive, postmodern, and other post-positivistic paradigms. Lather (1991: 44), for example, states that postmodernism has destabilized ‘assumptions of interpretive validity’, creating a need to revise the concept of validity. With respect to triangulation, she states that the ‘researcher must consciously utilize designs which seek counter patterns as well as convergence if data are to be credible’ (1991: 67).

Blaikie (1991) argues that one cannot combine theories and methods that have different or incommensurable epistemological and ontological assumptions. He asserts that qualitative and quantitative methods can be triangulated within paradigms, particularly positivism, but not between paradigms that are based on incompatible assumptions (e.g. positivism and interpretivism) and urges researchers to identify compatible and incompatible paradigms.

Sharing some of the same concerns about triangulation in relation to validity, some qualitative researchers have sought alternative rationales or have come up with different terms. Lincoln and Guba (1985) propose that triangulation is a means of establishing ‘credibility’, that is, the believability of the findings. Flick (1992, 1998) states that rather than being a method of validation, triangulation is an alternative to validation. Considering that ‘there is no longer one reality against which results can be verified or falsified’, Flick points out that triangulation ‘gives access to different versions of the phenomenon that is studied’ (1992: 194). Concurring that validation is not an appropriate standard while questioning the appropriateness of the image of the triangle, Richardson (2000) proposes that the ‘crystal’ should be the central image used in qualitative research and that the term ‘crystallization’ replace triangulation (see also Janesick, 2000). Coming from a postmodern perspective for the examination of mixed-genre texts, Richardson explains, ‘Crystals are prisms that
reflect externalities and refract within themselves, creating different colors, patterns, and arrays, casting off in different directions’ (Richardson, 2000: 934). Accordingly, what was previously considered triangulation becomes ‘the display of multiple, refracted realities simultaneously’ (Denzin and Lincoln, 2000: 6).

Nonetheless, researchers who continue to find triangulation valuable have found ways out of philosophical quandaries. Perlesz and Lindsay (2003) position themselves within a postpositivist paradigm between positivism and constructivism, but also use interpretive, feminist, and symbolic interactionist lenses. In their family studies, they give special attention to divergent findings, which lead them to ‘more complex understandings’ of ‘the coexistence of apparently contradictory statements or observations about emotional states’ (Perlesz and Lindsay, 2003: 37). Seale proposes that social research be considered ‘a craft skill’ that is ‘relatively autonomous from social theory or philosophy, yet drawing on these arenas of discourse as a resource’ (Seale, 1999: 466). Citing Silverman (1993), Cicourel (1974), and Flick (1992, 1998), he argues that triangulation ‘can deepen understanding, reveal ‘multiple constructed realities,’ (Seale, 1999: 474) and increase ‘scope, depth and consistency’ (Flick, 1998: 230).

Like Perlesz and Lindsay (2003), we position ourselves within a postpositivist paradigm. While rejecting the need to use triangulation as a form of validity, we find triangulation a useful tool for understanding convergent, complementary, and divergent ways in which reality is constructed. For this article, we will demonstrate data triangulation using transcribed interviews from a study of mothers and daughters as our data. We describe two methods of accomplishing this – the dyad and the group. In addition, we will discuss how we used investigator triangulation when we analyzed the data. We will begin by describing our study.

**THE STUDY**

The authors have been conducting cross-cultural, qualitative research on family adaptation to and coping with a daughter’s religious intensification. The families of origin are Jewish and relatively secular or moderate in their religious observance. The daughters have diverged from their parents’ model by becoming *baalot teshuvah,* a Hebrew term for women who have returned to traditional Judaism by becoming strictly observant (Orthodox). As social work faculty members who teach students about family functioning, we recognized that an intergenerational change in religious intensification could create friction between the daughters and their families of origin. For example, the daughters do not drive on the Sabbath and certain religious holidays and will eat only kosher food on kosher dishes, which in some cases precludes the daughters’ attending family celebrations and observing holidays with their parents. Parallel
studies of mothers and daughters have been conducted or are in process in South Africa, the US, Israel, and Holland.

The specific criteria for the mothers and daughters participating in the study interviews were that the daughters would be married, self-identify as b'lot teshuvah, and, in all studies except the one in South Africa, would be 30 years old or older and have at least one child. The investigators sought married women who were sufficiently committed to the religious choice they had made that they could reflect on the process and how it affected themselves as daughters and family members. An additional criterion was that the mothers had to have raised their children non-Orthodox for most of the daughters’ growing-up years. The daughters of some of the US and South African mothers lived apart from their families in Israel.

The primary method used was the in-depth individual interview. The interview guide consisted of about 30 open-ended questions. The questions explored the family history, religious orientation, expectations, family relationships, the daughter’s process of becoming religious, reactions of family members, difficulties, coping with difficulties, supports, and strengths. Participants gave consent for interviews to be audiotaped. Similar questions were asked of the mothers and daughters.

Our original goal in designing a study that included mothers and daughters was to enable us to understand how each viewed the daughter’s religious intensification, how each would describe the mother’s reaction, and how each saw their relationship and the changes in the family system. In the course of triangulating the reports of the mothers and daughters on the same topic, we developed new insights into the nature of triangulation and what it has to offer investigators and developed a systematic method of analyzing dyads and groups.

METHOD OF ANALYSIS I: THE DYAD

For the dyad method, the authors selected two representative pairs of transcribed interviews with mothers and daughters, one from their South African study, and the other from their study of US mothers whose Orthodox daughters live in Israel. Each of the investigators read these pairs of related mother and daughter interviews several times after which each created a table comparing mother and daughter responses to some topics that they agreed upon examining in advance (e.g., reactions to the daughter’s religious change, mother–daughter relationship, etc.) and others that surfaced in the transcripts. After each of them developed separate tables, they discussed their findings and came to a consensus about kinds of triangulation that had emerged and exemplars.

From the comparative analysis of the two dyads, they identified five types of triangulated data: (1) Same story, same meaning includes accounts in which
both participants gave similar answers to an interviewer’s question and indicated similar interpretations or assigned a similar meaning to the described phenomenon. At times they even used the same terms, words, or metaphors. (2) **Same story, different interpretations** occurs when both informants gave similar answers to a similar interview question but indicated that they had a different understanding or assigned a different meaning to the described phenomenon. (3) **Missing pieces** consist of information provided by one informant that was needed to understand the story and was not included in her counterpart’s description. (4) **Unique information** refers to a report that is provided by one informant only. This information reflects the history, background or personality of that particular participant. Unique information does not meet the criteria for ‘missing pieces’, because the information provided by the informant is not integral to understanding the full picture. (5) **Illuminating** are accounts that are different but not contradictory. The stories vary for a reason, for example, because of where the two parties are positioned in relation to each other. Accordingly, a mother’s story will be influenced by her status as a mother, a member of the older generation, and/or her current position as mother of an adult daughter; and a daughter’s will be influenced by her recollections of her life as her mother’s child and her current position as an adult daughter. We will provide illustrations of each of these types in the next several sections.

**Same Story, Same Meaning**

Varda, age 32, is the middle of three children of a Jewish mother and an Italian American father who converted from Catholicism to Judaism before he married his wife. During Varda’s childhood her parents divorced and each parent remarried. Varda’s older sister has been married twice; neither husband was Jewish. Varda was exposed to Orthodoxy by her cousin Yosef, and became Orthodox in her early 20s. After marrying and living in proximity to her mother for several years, Varda and her husband moved to Israel. Since then the mother has become Orthodox and Varda’s brother was moving in the same religious direction. When asked what Varda was like when she was growing up, her mother said, ‘She was always . . . searching for something . . ., she . . . was always like looking for something.’ On further reflection, the mother said jokingly, ‘I’m so glad that whatever, you know, she was doing that, she did this and didn’t shave her head and sell flowers at the airport.’

When Varda’s interviewer asked, ‘Did you ever think about God growing up, Varda, or about the universe?’ Varda responded along the same lines as her mother:

Yeah, the universe, for sure. I’ve always been like a searching type. I always wanted to know why we were here. And what was the reason. . . . My mother actually said . . ., of all her three kids, she thought I would be the one to end up selling
flowers at the airport [laughter] because I was always like a searching, like why this, why that.

Clearly mother and daughter saw Varda as a searcher and both were aware of the mother’s fear that she would become a Moonie. The image of Varda at the airport may have been a story that was told repeatedly in the family.

**Same Story, Different Interpretations**

The other interview we examined was with Kathy, who was 43 at the time of her interview. She reported growing up as ‘normal seculars . . . . We knew we were Jewish and that was basically it.’ Kathy is the next to oldest of four daughters, who reportedly have a close bond with each other and their mother. Since Kathy and her family became Orthodox and joined a religious community, they have not attended dinners of her family of origin that take place on the Sabbath. Her mother has not become kosher, but provides kosher food items served on plastic plates for her grandchildren who stay with her every day after school. Kathy’s mother stated that she would be hypocritical if she became kosher because she does not agree with this. Nevertheless, as Kathy explains, the mother and four daughters meet for lunch regularly:

. . . we have a thing every Tuesday, the sisters and my mother, we all meet for lunch. Now they go to treif [non-kosher] places. I come there; I’ve got my sandwiches with me. I ask the manager, ‘Can I please eat my sandwiches?’ and I have a cup of coffee in a polystyro cup or a glass cup. It’s plain black, and that is fine. But you do feel guilty. You know, what happens if a frum [Orthodox] person sees you sitting there, does she realize that you, that you’re . . . not eating the food, that you’re eating your own sandwiches?

Here Kathy explains that she accommodates to her family by bringing her own food with her while they eat in restaurants that are not acceptable to her and the Orthodox community of which she is a part. Even though she is not violating the kosher laws when she eats her own sandwich and drinks coffee in a Styrofoam cup, she is worried that someone from her religious community will see her in an inappropriate place and not realize that she has brought her own provisions.

Kathy’s mother tells a similar story about their lunches:

. . . when we meet every Tuesday to eat, she’s got to have a little sandwich and she’s got to eat her little sandwich and her polystyro, you know? So I’m sure, it’s hard for her because she misses that, but at the same time what she’s achieved takes over.

Like Kathy, her mother tells the interviewer that they meet for lunch on
Tuesdays, but here the mother sounds critical of her daughter’s special needs and does not seem to be aware of her daughter’s apprehension over being seen. The mother surmises that her daughter misses the restaurant food and finds it difficult to be different from other members of her family of origin, which Kathy confirms elsewhere in the interview where she says, ‘it does push you away’ (from them). The daughter does not speak about missing the freedom of eating non-kosher food out, but does miss being in synchrony with her mother and sisters.

**Missing Pieces**

Interviewing mother and daughter separately made it possible for one of them to provide information that the other excluded. When one combines the two interviews, one is able to perceive the story and its social context. Here we will show that Kathy and her mother provided divergent accounts of the 16-year-old son/grandson’s background and the context of his becoming Orthodox.

For this dyad, the daughter was interviewed on one occasion and the mother on a later date, both by the same interviewer. When it was the mother’s turn, this exchange took place:

Mother: . . . I don’t know if she told you about her children, did she tell you . . . Did she tell you they were adopted? . . .

Interviewer: Oh . . .

Mother: Well, they are adopted.

Looking back at the interview with the daughter, the researchers noticed that there was an opportunity for the daughter to have disclosed that her son was adopted, but Kathy did not share this information:

Interviewer: Can you just tell me about the role your mother played at the time of the birth of your children?

Daughter: The devoted grandmother. No, she was there to help. We were all, you see, basically it wasn’t only, only my mother. It was my sisters as well. We were all . . . there to help.

Interviewer: Such a close . . .

Daughter: a close-knit family that we were there to help. I mean if there was any time a problem and I needed my mom or my dad . . .

Interviewer: She was there.
Daughter: She was always there. They were always there for us. And vice versa when others had their babies, we were always there.

This interaction conveys the idea that the daughter had her children as babies, and it is possible that she adopted them when they were infants. Still, the daughter chose not to volunteer this information.

Nevertheless, Kathy's son's status as an adopted child is fundamental to understanding the daughter's and family's becoming Orthodox. According to Jewish religious law, a child is Jewish by virtue of being born to a Jewish mother. Thus, an adopted child whose biological mother is not Jewish is not considered Jewish unless he or she is converted and/or converts upon reaching bar or bat mitzvah age. Putting together the pieces provided by the mother and daughter, we are able to construct the following story about Kathy and her family's becoming Orthodox. We would not have been able to do so without the parts provided by the mother and daughter. The following story was constructed based on the mother's contribution.

When Jonas was 12, he began bar mitzvah lessons at a Reform temple. His ill uncle suggested that he try attending the more traditional Lubavitch service. Jonas acted on this suggestion and before long found himself attracted to the spirituality of the service. Subsequently his parents inquired whether it would be possible for him to have his bar mitzvah there, and learned that Jonas could not do so because he was not considered Jewish. In order to become Jewish, it was required that he engage in more rigorous learning than he had at the Reform temple and to formally convert.

After Jonas became Jewish and Orthodox, he would eat only kosher meat. At first Kathy made separate meals on separate dishes for her son while the rest of the family remained non-kosher. Finding this divisive, Kathy made the house kosher with the help of advisers from the Lubavitch community. Slowly she and her husband became part of the community that their son chose. Kathy made considerable effort to explore Orthodox Judaism. At the time of the interview she was becoming more and more immersed in Orthodoxy but not without feeling alienated from her extended family.

Another example of missing pieces is Varda's story. In her interview, Varda provided information about her mother's marriages that her mother had glossed over. According to the mother's account, she married her first husband in 1962 and was divorced in 1972 and married her current husband in 1976. They stayed together five years, got divorced for a year, and remarried. She gave the impression that she was married three times but two of these marriages were to the same man. According to the daughter, her parents were married in 1962 and divorced in 1974. Her mother remarried in 1975 for a short time (second marriage) and divorced and married her current husband in 1976 (third marriage).
than the one her mother described.

**Unique Information**

Kathy shared the following information, not mentioned by her mother, about her life prior to meeting her husband.

Interviewer: Can you tell me about your husband? You met him in South Africa?

Kathy: Basically, I met his cousin in Israel and I went to the airport and met his brother. And I came back here and then I met him. I actually went out with his, no, I was engaged to his cousin, came back to South Africa. I realized I was too young for this, this is nonsense. I then met my husband’s younger brother, went out with him for two years, and then married my husband. Does that make sense?

Interviewer: Incredible. Yeah.

Varda, too, provided unique information in her interview. She gave a detailed description of her father’s parents and siblings and his family’s lifestyle.

**Illuminating**

Most of the mothers and daughters in our studies reported that their relationships were currently close, but when asked to describe how it was in the past and present, they sometimes presented different accounts. For example, Varda’s mother had this to say about their relationship:

When she was very, very young, uh, we were very, very close. And then through the adolescent and teenage years, I would say . . . we were close in spirit, but not, not in every way. It was, it was difficult, but there has always been . . . with all of them . . . something on the inside that even though we were angry at each other or, you know, we had differences . . . [but] the love was there. It’s just that the times were hard. Now, I don’t think we’ve ever been as close as we’ve been since she became religious. . . .

Here we see Varda’s mother describing a strong emotional bond that made it possible for her to survive the normal strains of a daughter’s adolescence and
become very close in adulthood. She suggests that her daughter’s becoming religious contributed to their having a better relationship now. The mother alludes to difficulties but gives the impression that they were ordinary difficulties. Varda, however, portrayed their early relationship as problematic:

Growing up was, it was kind of pseudo-close. And I’ll explain what I mean. My mother had a hard time. She didn’t really have good marriages. She was married several times. She went through a lot. And I think I was the one that was kind of the strongest as far as the children were concerned, emotionally, and I was more like empathetic, or sympathetic to her. And she kind of like leaned on me a lot emotionally. And I think that gives a certain closeness, but obviously that was not like a completely healthy relationship. So that’s what I mean by kind of pseudo-close . . . it’s very close now. We e-mail all the time. Since we’re both religious, you know what I mean, it’s closer. You don’t have to like explain things to her. . . . And she still kind of asks for my advice on things a lot. It used to be a burden, but now I see it as kind of an opportunity, like, you know, just to, just give something back to your parents, you know what I mean?

Varda makes no mention of her own adolescence or a strong mother–daughter bond that held them together during childhood. Instead she describes her mother as emotionally needy and herself as a parentified child. She recognizes that what may have looked like closeness was her mother’s dependence on her, which Varda does not consider healthy. Now that Varda is an adult and both are Orthodox, she has come to see her relationship with her mother as truly rather than ‘pseudo’ close and her mother’s dependence as an opportunity for Varda to demonstrate the religious commandment to honor one’s parents by giving the gift of religious advice. Accordingly her account is influenced by her changing positions in relation to her mother.

Discussion of the Analyses of the Dyads

Triangulated findings have been described in the literature as convergent, complementary, and dissonant (Erzberger and Prein, 1997; Flick, 1992; Perlesz and Lindsay, 2003). ‘Same story, same meaning’ can be seen as a form of converged findings, as the stories are similar. ‘Missing pieces’ fits well with the definition of complementary findings when different parts can be brought together to produce an integrated whole (Erzberger and Prein, 1997). ‘Same story, different interpretations’ can be seen as a hybrid between convergent and dissonant (1997), as there is convergence in content but divergence in interpretation. ‘Unique information and ‘illuminating’ are new categories that emerged from our analysis. The example given for the former shares some of the features of the dissonant type, but it is anomalous rather than dissonant; the latter has some convergence, complementariness, and divergence, but overall it adds texture and dimensionality to our understanding.
Although Erzberger and Prein argue that divergence suggests that changes may need to be made in the theoretical formulation to accommodate the divergences, we see no such need when family members report different experiences. Divergent data are common in family research because of the multiple perspectives that derive from having different positions and occupying different roles in the family (Perlesz and Lindsay, 2003). Social work practitioners make use of these differences in couple and family therapy, when they explore the different perspectives of family members as a means of joining the family, in order to promote awareness of tacit assumptions and unrecognized differences, and to help family members express their unique voices. Furthermore, as we will argue next, interpretations of triangulation are influenced by the theoretical paradigm held by the researcher.

Diverse theoretical perspectives would view our analysis differently. From a positivistic perspective on triangulation (e.g. Kopinak, 1999), ‘same story–same meaning’, can indicate the validity or ‘truth’ of the findings. Triangulation, according to this theoretical orientation, will focus on the similarities and overlook or ignore different interpretations. According to the post-positivist interpretive, feminist and constructivist paradigms (e.g. Flick, 1992, 1998; Lather, 1991; Perlesz and Lindsay, 2003; Silverman, 1993), the divergent findings detected by triangulation are of interest. Triangulation based on elements such as ‘same story – different interpretations’, ‘missing pieces’, ‘unique information’, and ‘illuminating’ will lead to a more complex understanding of the researched phenomenon. Accordingly, triangulation is a resource that can sharpen, enhance, and open up more nuanced interpretations. In both social work research and practice with families, triangulation can help uncover the complexity of family relations.

**METHOD OF ANALYSIS II: GROUPS**

The second method, group analysis, looks at triangulation within groups and between groups. It is illustrated here by a study involving individual interviews with 17 mothers and their 17 religious daughters where both live in the US within two hours of each other. This study allowed the investigators to hold geographic separation constant so that they could examine the differences among mothers and daughters in their religious cultures.

The analysis consisted of a multi-staged, sequential process that starts with dyads and moves to the group level. For the first stage, the authors examined each dyad’s response to a question asked of both mother and daughter about how the mother had envisioned her daughter as an adult (the mother’s ‘image’ of her daughter as an ‘adaptive adult’; see Kagan, 2000; Roer-Strier, 2001; Roer-Strier and Rosenthal, 2001; and Shimoni et al., 2003). This question encompassed the mother’s expectations of her daughter prior to the time the daughter...
**Table 1** MOTHER AND DAUGHTER’S RESPONSES ON THE MOTHERS’
EXPECTATIONS OF THEIR DAUGHTERS

<table>
<thead>
<tr>
<th>Mothers’ responses</th>
<th>Daughters’ responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I never had any preconceived notions about what my children should be or how they should be . . . I just wanted them to be successful . . . I really just wanted them to be successful and happy in what they did. (213M)</td>
<td>I think that she probably expected, because initially I was on this track, that I was going to become a professional of sorts; whatever, probably something in the arts. And that I would live a life probably very similar to her own . . . I’m sure she wanted me to be in a relationship where I was well taken care of, and fulfilled, and happy, and cared for. (213D)</td>
</tr>
<tr>
<td>I just assumed that she’d be a lawyer or be some sort of high-powered job and um leading a very, not a jet-set life necessarily but you know a life where she went and did – I mean nothing like she turned out. (205M)</td>
<td>I think that my mom always envisioned that I would go far and that I would do good things in this world and that I could date anyone and do anything. I think that she had a lot of confidence in what I would accomplish and really helped me to get there you know . . . (205D)</td>
</tr>
<tr>
<td>I wanted her to have a profession, either a lawyer or a doctor . . . because she was very, very bright . . . And I just saw her – and I think that was one of the great disturbances that I had when she decided to marry so young. (212M)</td>
<td>I think she wanted me to do it all. She wanted me to have a career, do whatever I wanted, but then she also wanted me to have kids and be with them. (212D)</td>
</tr>
<tr>
<td>It had to be what she wanted to do. Of course, education, we wanted her to have as good an education as she could have. What she wanted to do, hopefully, she would get married only because that’s the way we live. But I didn’t think of it. That wasn’t in the forefront. . . . I thought maybe she would go into, to sing, she was very, very talented. And she had to make these choices for her. For herself. Certainly I couldn’t make that for her. I wasn’t a stage mother, let’s put it that way. (220M)</td>
<td>Right well my mother was not a career woman herself so it wasn’t something that she pushed me for. She never went to college but was very supportive and helped me a lot when I was getting into college and what-not. My mother was just a very generally supportive woman, without real expectations except for I think living a generally good, moral life and you know. (220D)</td>
</tr>
</tbody>
</table>
became Orthodox. The mother was told, ‘Parents usually have an image of how they want their child to turn out as an adult. Can you tell me how you wanted your daughter to turn out before she became observant?’ The parallel question for daughters was, ‘How do you think your mother wanted you to turn out as an adult?’ Using the transcribed interviews, the authors examined the responses of each mother and daughter dyad, all the mothers, and all the daughters. Table 1 provides examples of how responses of related mothers and daughters compared on this question. As shown in the dyadic analysis in the previous section, some mothers and daughters had similar responses and others diverged.

The next step was to examine all the mother and daughter responses to this question to determine whether there were common issues. After gathering the responses of mothers and daughters, the investigators identified themes in these data. Table 2 presents the themes and the frequencies of mothers and daughters (not necessarily dyads). Notably, mothers and daughters were in accord about mothers’ expectations in regard to education, having a profession, and marriage. However, some themes were in the daughters’ discussions about their mothers’ expectations and not in the mothers’ (personal qualities and leading the same kind of life as mother). Mothers stressed the expectation that

<table>
<thead>
<tr>
<th>Coding category</th>
<th>Number of mothers’ interviews</th>
<th>Number of daughters’ interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be happy, fulfilled, and successful</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Education and work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. College or more</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>2. Profession, career, or high-powered job</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Marriage and family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. ‘Marry well’, good marriage</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>2. Have a family, children</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Choice (make own decisions, follow own talents and desires)</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Have a loose connection to Judaism (some sort of Jewish life; cultural Judaism)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Personal qualities</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Lead the same kind of life as mother</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>
daughters make their own choices toward being happy, fulfilled, and successful, whereas daughters believed that their mothers expected them to follow their mother’s lifestyle. Overall, this within group data triangulation shows where there is consensus among mothers as a group, among daughters as a group, and between mothers and daughters on the mothers’ expectations.

For the third stage, the investigators focused first on the daughters’ responses to a set of questions asked only of them and later compared the themes derived from these responses with those on the mothers’ images identified in stage two. The daughters were asked to describe their images of their daughters, sons, and/or children in general, and to articulate their goals for their children. The researchers first individually and later collaboratively identified themes that emerged from the daughters’ discussions of their expectations of their children. Many of these themes were similar to those found in the previous analysis.

The third step, between group data triangulation, allowed the researchers to discern expectations particular to the mothers’ secular Jewish culture in comparison with the daughters’ adopted Orthodox Jewish culture. Table 3 shows the similar themes but different interpretations of these themes. Quotations from interviews illustrate each theme. Because the mother column was based only on the interviews with mothers about their expectations, the last two characteristics are missing. Looking at the content of the mother and daughter interviews, one becomes aware of the different cultural worlds that the two family members occupy. The expectations that the mothers as a group reported are individualistic. Mothers want their daughters to become educated, make choices over a profession, and to be happy and fulfilled. In contrast, the daughters as a group give primacy to Judaism. They ground their expectations in the teaching of the Hebrew Bible (the Torah), Jewish law, and other religious texts. Choices are possible, so long as they do not conflict with Torah values. This table also shows that mothers and daughters have common aspirations for their children, but the commonalities are embedded in different cultural contexts.

Discussion of Method of Analysis II

The second method of analysis described in this article was triangulation within groups and between groups. This multi-staged, sequential process combined the grounded theory approach of theme analysis and group comparisons. The triangulation revealed similarities and differences in the perceptions of the same investigated issue (mothers’ and daughters’ perceptions of the mother’s expectations) and similarities and differences of group differences in perceptions of a different but parallel issue (mothers’ expectations of their daughters, daughters’ expectations of their children).

The group analyses shed light on cultural elements and group differences and profiles. Creswell (1998) states, in relation to ethnographic research, that the
Table 3  WITHIN GROUP AND BETWEEN GROUP ANALYSIS ON MOTHERS’ EXPECTATIONS OF THEIR DAUGHTERS AND DAUGHTERS’ EXPECTATIONS OF THEIR CHILDREN

<table>
<thead>
<tr>
<th>Themes</th>
<th>Mothers’ expectations of their daughters</th>
<th>Daughters’ expectations of their children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal value and goal</td>
<td>‘I think what ultimately we wanted is what all parents want, is for their children to be happy and fulfilled.’ (211M)</td>
<td>‘We strongly value learning Torah . . . we send our children to Torah school and we would hope that we give them over Torah values that they would always be connected to God and Judaism.’ (217D)</td>
</tr>
<tr>
<td>Education</td>
<td>‘Of course, education, we wanted her to have as good an education as she could have.’ (220M)</td>
<td>‘. . . hopefully my sons will be able to learn as long as they can, as long as they can manage to.’ (219D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘I want my kids to go to college, but I want them to go to [local college where] . . . they’d get . . . something practical. I’m not looking for them to go to college to get . . . experience or to get an enlightening education.’ (211D)</td>
</tr>
</tbody>
</table>

*continued*
<table>
<thead>
<tr>
<th>Themes</th>
<th>Mothers’ expectations of their daughters</th>
<th>Daughters’ expectations of their children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career or profession</td>
<td>Have a career, profession, or high-powered job:</td>
<td>Pursue a profession that is compatible with being observant:</td>
</tr>
<tr>
<td></td>
<td>‘I thought she would have a career. . . . a lawyer or a professor or something like that.’ (207M)</td>
<td>‘I want my children to be Torah observant Jews. However they do it and in whatever way, whatever profession, whatever they do, it doesn’t matter to me.’ (220D)</td>
</tr>
<tr>
<td>Marriage and family</td>
<td>Be happily married and have a small family:</td>
<td>Marriage and family are fundamental (marry and have children; spend time with children; be a good husband or wife; be happily married):</td>
</tr>
<tr>
<td></td>
<td>‘Well, I hoped she would make a good marriage. By that I don’t mean financially good, but that she’d be happy.’ (215M)</td>
<td>‘And hopefully they’ll both be happy and married with children.’ (209D)</td>
</tr>
<tr>
<td></td>
<td>‘Well, I didn’t think that she would have six children.’ (204M)</td>
<td>‘I want her to raise a family, I want her to be a good wife . . . ’ (211D)</td>
</tr>
<tr>
<td>Choice</td>
<td>Make own decisions, follow own talents and desires.</td>
<td>Make choices so long as they do not conflict with Torah values:</td>
</tr>
<tr>
<td></td>
<td>‘And I wanted my children to make their decisions, what was right for them. . . . I wasn’t a stage mother, let’s put it that way.’ (220M)</td>
<td>‘I feel comfortable if [my daughters] chose to go to professional school and pursue a profession whether it’s to be a teacher or to be a doctor, I would be supportive of that and I would also be supportive if they want to support a husband in Torah, him learning full-time, or if they want to be home as a mother full-time.’ (217D)</td>
</tr>
</tbody>
</table>
Table 3 Continued

<table>
<thead>
<tr>
<th>Themes</th>
<th>Mothers’ expectations of their daughters</th>
<th>Daughters’ expectations of their children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection to Judaism</td>
<td>There should be a balance between one’s Jewish and secular life:</td>
<td>Children should embrace Judaism:</td>
</tr>
<tr>
<td></td>
<td>‘I think one needs to have some other full existence outside of Torah.’ (217M)</td>
<td>‘I hope that they can connect to Judaism. I mean, my Jewish hopes for them I guess would be to connect to Judaism and God in a very deep and meaningful way.’ (212D)</td>
</tr>
<tr>
<td>Personal qualities</td>
<td></td>
<td>Children should be well-adjusted, have high self-esteem and develop good character traits (midos):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘I want them to feel good about themselves . . .’ (201D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘My goals for them, is that they should grow up with good character traits. With good midos . . .’ (210D)</td>
</tr>
<tr>
<td>Lead the same life as mother</td>
<td></td>
<td>Children should remain Orthodox:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘Well, I would like them to stay in this type of lifestyle, absolutely. . . It’s what I want. I mean, I have been spending like most of their lifetime, you know, going along the path that I think would be best for them and it is how I would want them to raise their families, and if they wanted to become even more religious, fine by me.’ (201D)</td>
</tr>
</tbody>
</table>
underlying elements of a culture can be discovered by investigating the social relations among group members. Although our research is not ethnographic, we have found that triangulation of data can help the researcher develop a ‘cultural portrait’ and discern the rules of the ‘culture-sharing group’ (Creswell, 1998: 58, 60). This portrait can be further triangulated with observations from anthropological literature on the group’s cultural context, documents, and other sources of information on the culture under investigation.

CONCLUSIONS

This article discussed triangulation and described two different methods of accomplishing data triangulation – dyad and group analyses. These approaches offer social work researchers and practitioners tools to enhance their understanding of families and identify areas of family conflict as well as areas of similarity in family values and expectations. For example, both dyad and group triangulation revealed that daughters perceived their mothers as expecting them to follow their lifestyle (which the daughters chose not to follow), while at the same time the daughters expected their own children to follow their chosen Orthodox lifestyle. This contradiction raises questions about the needs of the daughters in the study to separate and individuate and their blind spots in relation to their own behavior. Following the recursive pattern of qualitative research, these questions can be brought back to the forefront to determine whether separation-individuation was a prominent issue, which it was.

Both methods of analysis discussed in this article included what Denzin (1989) describes as investigator triangulation. Each of us read the interviews several times, coded them, and created tables comparing mother and daughter responses to some topics that we agreed to examine in advance and others that surfaced in the examination of the transcripts. Subsequently, we met, separate tables in hand, to discuss our findings. Although there was considerable overlap, one of us had come up with more categories than the other. Together we combined categories, coming to a consensus about kinds of triangulation (dyadic analysis) and themes (group analysis) that had emerged. According to the positivist perspective on triangulation this kind of investigator triangulation can contribute to the study’s rigor by enhancing the inter-rater reliability of the analysis. According to the post-positivist, interpretive, feminist and constructivist paradigms, any type of analysis is interpretive in nature. Qualitative researchers coming from these perspectives can engage in team discussions of the triangulation to reflect on the interplay between researchers’ diverse perceptions, enriching the analysis.

Triangulation may also contribute to clinical social work practice. Triangulated data, such as the examples we presented from our research, can be used as a topic for discussion in intervention with families where particular members
decide to diverge from the chosen life style of their families. Exploring different perspectives and helping family members become aware of the different meanings individuals attribute to the same experience could aid families to negotiate differences and reach acceptance. Social workers might triangulate their own perceptions with those of family members and discuss the differences in supervision. Co-therapists might try to do the same thing.

Triangulating the perspectives of social workers and clients may be of importance not only in the clinical domain but on a macro level as well. For example, one might hold a forum in which the perceptions of clients and social workers are shared on issues central to social work, such as the causes of poverty and means to defeat it, welfare reform, and family violence. Triangulation of perceptions on these issues can yield differences in definitions, experiences, and ideas about modes of intervention. In triangulating the voices of social workers and clients, qualitative social work researchers could contribute to discovering barriers for effective interventions as well as finding new venues to develop inclusive practices.

Interdisciplinary teamwork is another area of practice in which triangulation is valuable. Professionals from different disciplines who have different analytic and theoretical frameworks and tools can triangulate their findings and determine where they are similar, where they diverge, where they complement each other, where each contributes unique information, and where they illuminate the context of the client’s life. Professionals will strive to come to a consensus on an assessment and an integrated treatment plan for a client, planning an interdisciplinary intervention or designing a strategy for social change, but they may also work on separate tracks where one professional has something unique to contribute. Here, too, differing perspectives can enrich understanding, draw attention to what others have missed, and contribute to achieving a fuller understanding of the client or the target social problem.

Our suggested method of between and within group triangulation has the potential to make an important contribution to the study of immigrant, refugee and minority families as well as families with members who diverge from the families’ expectations (e.g. interfaith marriage, same-sex marriage, participation in cults, etc.). For social work research and intervention with families in which there are cultural differences or diverse subcultures, more sensitive tools are needed to detect nuances in values, perceptions, and behaviors. In this respect, the proposed method of triangulation leads to what Richardson metaphorically describes as the ‘crystal,’ because ‘prisms . . . reflect externalities . . . creating different colors, patterns, and arrays, casting off in different directions’ (2000: 934).
Note

References


Robert G. Sands, PhD, is Professor, School of Social Policy and Practice, University of Pennsylvania, Philadelphia, PA, USA. She is the author of *Clinical Social Work Practice in Behavioral Mental Health* and co-author of *Interprofessional and Family Discourses*. Her areas of specialization are qualitative research, religious change, family relations, and clinical practice. Address: University of Pennsylvania School of Social Policy and Practice, 3701 Locust Walk, Philadelphia, PA 19104–6214, USA. [email: rgsands@sp2.upenn.edu]

Dorit Roer-Strier, PhD, is Senior Lecturer at the Paul Baerwald School of Social Work, Hebrew University of Jerusalem, Israel. She is the co-author of *Cultural Diversity: A Challenge to Human Services*. Her areas of specialization are
qualitative research, human development in cultural contexts, family studies, culture change and cultural competence. Dr Roer-Strier was a visiting scholar at the University of Pennsylvania 2002–2005. Address: Paul Baerwald School of Social Work, The Hebrew University of Jerusalem, Mount Scopus, Jerusalem, Israel. [email: msdiri@mscc.huji.ac.il]