Focus on Research Methods
Toward a Metasynthesis of Qualitative Findings on Motherhood in HIV-Positive Women

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Abstract: A qualitative metasynthesis of qualitative findings ought to be more than a mere summary of those findings. Yet the processes by which the interpretive innovation expected of qualitative metasynthesis projects can be achieved remain opaque. Several analytic devices for the metasynthesis of findings were clarified in the course of an ongoing methodological project involving 45 reports of qualitative studies of HIV-positive women. These devices include the creation of a taxonomy of findings, the explicit use of sustained comparisons, the translation of in vivo concepts, and the use of imported concepts. Any qualitative metasynthesis of findings constitutes an interpretation at least three times removed from the lives represented in them. Clarifying the analytic devices used to create such metasyntheses is essential to demonstrating that despite being far away from participants’ lives, these interpretations remain close to them. © 2003 Wiley Periodicals, Inc.

Keywords: HIV-positive women; motherhood; qualitative analysis techniques; qualitative metasynthesis; qualitative methods; research integration; systematic review

Systematic reviews of empirical research are at the heart of the evidence-based practice toward which health care practitioners aspire (Stevens, 2001). Such reviews involve formal summaries of research findings in specified clinical domains with a view toward evaluating them for utilization in practice (Stetler et al., 1998). Largely based on conventional “hierarchical ratings of multiple forms of clinical evidence” (DeBourgh, 2001, p. 463), in which the randomized clinical trial is viewed as offering the “best evidence” (Lohr & Carey, 1999) and qualitative research is viewed as offering the worst or no evidence at all, most
systematic reviews of research have involved quantitative studies.

Yet an upsurge of appreciation for the value of qualitative research and the rapid proliferation of clinically relevant qualitative studies have called into question this way of rating evidence and have promoted an interest in conducting systematic reviews or integrations of qualitative studies. This new turn to what is variously called "qualitative metasynthesis," "qualitative meta-analysis," "qualitative meta-data analysis," and "meta-ethnography" is evident in the burgeoning methodological literature on the subject (Britten et al., 2002; Campbell et al., 2003; Estabrooks, Field, & Morse, 1994; Jensen & Allen, 1996; Kearney, 1998, 2001b; Noblit & Hare, 1988; Paterson, Thorne, Canam, & Jillings, 2001; Sandelowski, Docherty, & Emden, 1997; Schreiber, Crooks, & Stern, 1997; Sherwood, 1999; Thorne et al., 2002) and in the growing number of reports of studies designated as qualitative metasyntheses or meta-analyses (Barroso & Powell-Cope, 2000; Beck, 2001, 2002; Burke, Kauffmann, Costello, Wiskin, & Harrison, 1998; Finfgeld, 1999, 2000; Jensen & Allen, 1994; Kearney, 2001a; McNaughton, 2000; Morse, 1997; Morse & Johnson, 1991; Nelson, 2002; Paterson, 2001; Paterson, Thorne, & Dewis, 1998; Russell, Bunting, & Gregory, 1997; Sherwood, 1997; Thorne & Paterson, 1998).

Like the terms phenomenology and grounded theory, the term qualitative metasynthesis refers both to an interpretive product and to the analytic processes by which the findings of studies are integrated, compared, or otherwise put together. Although similarities exist between them, qualitative metasyntheses are different from (a) conventional narrative reviews of qualitative or quantitative research; (b) quantitative meta-analyses of quantitative research; (c) secondary analyses and pooled case comparisons of qualitative data (Thorne, 1994; West & Oldfather, 1995); (d) metamethod and metatheory (Paterson et al., 2001); and (e) syntheses of data constituting the metamethod and metatheory (Paterson et al., 2001; Paterson, Thorne, Canam, & Jillings, 2001; Sandelowski, Docherty, & Emden, 1997; Schreiber, Crooks, & Stern, 1997; Sherwood, 1999; Thorne et al., 2002) and in the growing number of reports of studies designated as qualitative metasyntheses or meta-analyses (Barroso & Powell-Cope, 2000; Beck, 2001, 2002; Burke, Kauffmann, Costello, Wiskin, & Harrison, 1998; Finfgeld, 1999, 2000; Jensen & Allen, 1994; Kearney, 2001a; McNaughton, 2000; Morse, 1997; Morse & Johnson, 1991; Nelson, 2002; Paterson, 2001; Paterson, Thorne, & Dewis, 1998; Russell, Bunting, & Gregory, 1997; Sherwood, 1997; Thorne & Paterson, 1998).

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METHOD FOR METHOD

This article is based on completed work in an ongoing methodological project to develop a usable and transparent protocol for combining the findings of health-related qualitative studies. This project can be characterized as an audit trail (Rogers & Cowles, 1993), as its primary product will be comprised of process. Methodological clarification and experimentation thus constitute the major work of this study.

Qualitative studies of women with HIV infection were chosen as the method case, as more than enough studies in this domain exist to warrant synthesis, and it is an area of great importance to women’s health and nursing practice. Only fairly recently in the history of this infection have women been recognized as other than vectors of HIV to men and children (Bova, 2000; Cohan & Atwood, 1994). All qualitative studies conducted with HIV-positive women living in the United States of any race, ethnicity, nationality, or class were eligible for inclusion.1

We liberally defined “qualitative studies” as empirical research with human participants conducted in any research paradigm that used what are commonly viewed as qualitative techniques for sampling, data collection, data analysis, and interpretation. We excluded: (a) qualitative studies in which no human beings were participants (as in discourse or content analyses of media representations of HIV-positive women); (b) qualitative studies in which no HIV-positive women participated (as in studies of nonseropositive women caregivers of HIV-positive persons, or studies of professional caregivers or children of HIV-positive women); (c) mixed-methods studies in which qualitative findings could not be separated from quantitative findings; (d) mixed-sample qualitative studies in which findings about HIV-positive women could not be separated from those about other groups of women (such as HIV-negative

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1Further details concerning inclusion criteria and procedures for searching for and retrieving the qualitative reports for the first phase of this project may be found in another publication (Barroso et al., in press).
women or women with cancer); and (e) journalistic or other nonresearch, albeit narrative, accounts of HIV-positive women.

No report was excluded for reasons of “quality.” As we have argued in detail elsewhere (Sandelowski & Barroso, 2002, in press-a), no consensus exists about the notion of quality in qualitative research or about the use of quality criteria in systematic reviews of research. Excluding reports of qualitative studies because of inadequacies in reporting (a common problem in all research reporting), or because of what some reviewers might perceive as methodological mistakes, will result in the exclusion of reports with findings valuable to practice that are not necessarily invalidated by these errors. We therefore concluded that until more consensus exists regarding quality in qualitative research, excluding reports on the basis of ill-conceived and debatable notions of quality is to introduce the single most important source of bias into systematic reviews or integrations of qualitative research findings.

Instead of using quality criteria to evaluate reports, we used a typology of qualitative findings that we developed to emphasize differences in kind between reports of studies, not differences in quality (Sandelowski & Barroso, in press-a). To minimize error deriving from our decision not to exclude reports for reasons of quality, we conducted a posteriori analyses (Cooper, 1998) of findings. These analyses were specifically directed toward determining how individual reports as well as reports stratified by type of finding contributed to the synthesis of the findings we produced. We ultimately excluded reports for only two reasons: (a) when we discerned violations of the rights of human subjects, as clearly occurred during the course of the study reported in one dissertation; or (b) when reports contained no findings. In these latter reports (labeled “no-finding reports” in our typology), researchers had simply presented the data they had collected as if they were findings without synthesizing those data into findings. We ultimately excluded selected findings in included reports for only one reason: when we discerned no data to support those findings. Rather than negating the need for “rigor” in qualitative research, we looked for evidence of it in the empirical support researchers offered for their findings, as opposed to methodological conformity, congruence, or sophistication.

The bibliographic sample consists of 99 studies, including 66 published works (62 journal articles, two books, one book chapter, and one technical report) and 33 unpublished works (four master’s theses and 29 doctoral dissertations). These works are the relevant studies retrieved—using all the major channels of communication Cooper (1998) described—between June 1, 2000 (when the project began) and June 30, 2001 (the end of the first phase of the project). The first qualitative study of women with HIV infection known to us to meet our inclusion criteria was published in 1991.

We chose to focus our first efforts on those works reporting findings on motherhood in the context of maternal HIV infection. A sample size of 99 is too large to allow intensive analysis of each report and to undertake the methodological detailing and experimentation required of a project focused on developing method. Researchers embarking on research integration studies typically ask specific research questions that only selected findings in a domain of inquiry can answer. Moreover, because motherhood is a uniquely female experience, a focus on it might permit conclusions to be drawn about the unique and common aspects of the relationship between gender and HIV infection. Accordingly, our research question was: What is the meaning and experience of motherhood for HIV-positive women? “Motherhood finding” was defined as any result specifically addressing the decision to become a mother and the experiences of becoming or being a mother to, or of having or caring for, minor children. Although several reports offered a few quotations or incidents relating to grandmothers caring for their adult children’s children and/or to mother–adult child relations, the vast majority of these findings were derived from mothers of minor children whom they themselves had conceived and carried.

Of the 99 reports in the total sample for the project, 45 contained findings on motherhood. (This number includes 26 published and 19 unpublished reports but excludes the 1996 Walker dissertation that is identical to the 1998 Walker book that was included.) These studies comprise the data for this article (they are listed at the end). Excluded from consideration here were reports, or findings in individual reports, in which mother was used as a synonym for woman. In these included reports and findings women were referred to as mothers because they

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2Although intended to signify a type of finding, the placement of a report in a no-finding category may also be viewed as a judgment about its quality. We discuss the inevitable conflation of differences in kind with differences in quality in Sandelowski & Barroso (in press-a).
happened to be mothers, not to describe something about becoming and being a mother or having and caring for children.

In 21 of the 45 reports, the research purpose was stated as the examination of some aspect of motherhood from the vantage point of HIV-positive mothers themselves. The remaining 24 reports contained findings pertaining to motherhood (also exclusively from the vantage point of HIV-positive mothers) in the context of other stated research purposes, most notably, to describe living with HIV infection. Individual samples were wholly comprised of women of reproductive age, consisting entirely or mostly of pregnant women and/or mothers. In the majority of studies all or the majority of women participating were from minority groups, primarily African Americans. Sample sizes ranged from 3 to 159, with a total sample size of 925 across all reports (not counting reports of studies with common samples).

None of the studies featured in these reports was explicitly located in any theoretical orientation toward motherhood, and 19 reports contained no explicit reference to any theoretical orientation. The authors of seven reports situated their studies in gender-related frames of reference, including feminist theories, gender scripts, and cultural norms of motherhood, whereas the authors of 19 reports situated their studies in concepts or theories not explicitly related to either motherhood or gender, such as stigma, self-care, and stress and coping.

**Qualitative Metasummary Versus Qualitative Metasynthesis**

The work we present here is based on the extraction of findings from each of these reports. We previously detailed this process and the calculation of frequency effect sizes to produce what we called qualitative metasummaries of qualitative findings (Sandelowski & Barroso, in press-b). In that article we argued that because the findings in the majority of the reports on motherhood were themselves in the form of summaries or surveys—as opposed to interpretive syntheses—of data, they did not lend themselves well to the translation or grounded-theory techniques most frequently referred to in published metasyntheses of qualitative findings (e.g., Kearney, 2001a; Paterson, Thorne, & Dewis, 1998). Such techniques require a level of interpretive development not demonstrated in survey findings, which by definition merely summarize data. We therefore proposed in that article that qualitative metasummaries of qualitative findings can be useful end products of systematic reviews of qualitative research because they allow the inclusion of studies with valuable findings that some researchers would argue either are weak examples of qualitative research or not qualitative research at all. In that article we proposed, too, that qualitative metasummaries of qualitative findings are not only useful outcomes of systematic reviews but are also a means toward creating qualitative metasyntheses. Such metasummaries provide a firmer and more communicable foundation for the interpretive innovation ideally thought to characterize qualitative metasyntheses.

Accordingly, the move toward metasynthesis we pick up in this article begins where we left off in that previous article (Sandelowski & Barroso, in press-b), that is, with 93 statements representing—in parsimonious form—the almost 800 statements of findings extracted from all 45 reports. These abstracted findings were arranged in 10 sections we named to correspond to the topics addressed in the findings pertaining to motherhood, for example, “positive and negative features of motherhood,” “stigma and disclosure,” and “custody, legacy, and the future.” Within each of these categories, findings were ordered according to the strength of their effects across reports, beginning with the most frequently occurring findings. Adapting techniques described by Onwuegbuzie (in press) and Onwuegbuzie and Teddlie (2003), we calculated frequency effect sizes for each finding by dividing the number of reports containing the finding by the total number

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3This raises the question of whether the studies we reviewed were less methodologically sophisticated than the studies reviewed in other metasynthesis projects. We doubt this because our years of experience reading a diverse array of qualitative studies conducted in the practice disciplines led us to conclude that most were at best thematic surveys of data, as opposed to interpretive syntheses of them. We also surmised that surveys of data were more prevalent when a field of investigation was new. Qualitative studies of HIV-positive women have been conducted for only a decade. But without formally reviewing the studies in these other metasynthesis projects ourselves, we are in no position to offer a credible answer to this question.

4Note the conflation here—alluded to in note 2—between differences in kind of findings (surveys vs. syntheses) and differences in quality of findings (i.e., surveys are weak forms of qualitative research or not qualitative research at all).
of reports, not counting—in either the numerator or denominator—reports of studies with common samples that had the same finding. Table 1 shows only the 10 findings in the topical categories they represent with frequency effect sizes greater than 15%.

**METHODOLOGICAL APPROACHES AND ANALYTIC DEVICES**

Like the term case study, the term qualitative metasynthesis does not in and of itself signal any specific method. Depending on the purpose of the metasynthesis, and on what a set of findings allows in the way of analytic treatment, a range of qualitative methodological approaches may be used to accomplish it. For example, if the purpose of a metasynthesis is to develop theory in a target domain and the findings in the reports of studies in that domain lend themselves to theoretical transformation, grounded theory will be a suitable methodological approach to metasynthesis (Kearney, 2001a). Grounded theory may even be seen as a kind of qualitative metasynthesis, as the key objective of grounded theory is the development of successively more abstract and formal theories. Derived from substantive or situation-specific theories, these formal theories have the complexity to encompass increasingly more diverse domains of research and practice (Kearney, 1998). If the purpose of a metasynthesis is to address the relationship among the findings in individual reports, a translation technique may be suitable, assuming that the central findings in

| Table 1. Frequency Effect Sizes of 10 Mothering Findings in 45 Qualitative Reports of Studies of HIV+ Women |
|--------------------------------------------------|----------------------------------------------------------|
| Abstracted Findings (N = 93)                      | Effect Size (%):                                         |
| Positive features of motherhood                   |                                                          |
| 1. Children were the main reasons to live, fight, get off drugs, care for oneself, and avoid risky behaviors | 45                                                      |
| 2. Whether their children were in or out of their care or custody, being a mother was central to women’s lives: a source of self-esteem, strength, normality, inspiration, pride, hope, joy, sense of well-being, and sense of self as a whole woman | 32                                                      |
| 3. Children were important sources of physical, practical, emotional, and social support and unconditional love to their mothers, buffering the negative effects of HIV | 16                                                      |
| Negative features of motherhood                   |                                                          |
| 9. The combination of mothering and HIV was physically demanding | 19                                                      |
| 10. Maternity/life is often the context of HIV diagnosis/death in women | 18                                                      |
| Stigma and disclosure                             |                                                          |
| 25. Mothers struggled with whether to disclose their HIV to their children, especially young children; worried about the effects on child and maternal welfare and the mother–child relationship of disclosure of maternal HIV to their children; and, engaged in strategies to disclose or delay or avoid disclosing their HIV status to their children | 60                                                      |
| Vertical and horizontal transmission to fetus and children |                                                          |
| 47. Women worried that they would transmit HIV to their fetuses and children | 19                                                      |
| 48. Mothers felt guilt/remorse/blame (from children or others) over their perceived deficits as mothers and for infecting children | 18                                                      |
| Custody, legacy, and the future                   |                                                          |
| 70. Mothers had concerns over child care and/or placement, especially as the mothers’ disease worsened and/or after their death | 52                                                      |
| Reproductive decision making                      |                                                          |
| 83. Both HIV-related and -unrelated factors were involved in women's decisions to conceive, continue, or terminate pregnancies, with the same or different morality, desire versus risk assessment, or circumstances leading to the same or different decisions | 25                                                      |

*Note:* Findings are shown as numbered in the complete table. Frequency effect sizes were computed by dividing the number of reports containing the finding minus the number of reports with common samples with the same finding divided by the total number of reports, or 45, minus the number of reports with common samples with the same finding. Only findings with effect sizes >15% are shown.
these reports are in the form of the concepts or metaphors required for this approach (Noblit & Hare, 1988). If the purpose of a metasynthesis is to show how research findings are both products and (re)producers of discourse, or that they are exemplars of certain kinds of cultural stories, the use of a discourse or narrative methodology will be best (Powers, 2001; Riessman, 1993).

Method thus enters qualitative metasynthesis projects by way of the synthesists’ purposes for metasynthesis and their appraisal of the nature of the findings themselves, not by way of the researchers’ method claims. Syntheses should not rely on the method that researchers stated they used to produce their findings in order to choose the method to be used to produce a metasynthesis of those findings. This is because of the discrepancy that often exists between method claims and the method actually used, as discernible in the findings. For example, as we have detailed elsewhere (Sandelowski & Barroso, 2002, in press-a), reports of studies designated as grounded theory may actually contain no conceptual rendering of data. But such methodological incongruence does not alone invalidate the findings (which may be well supported by the data presented), but rather calls for a different reading of those findings in order to achieve methodological congruence. A study designated as grounded theory that produces only a topical survey of findings should be read as a descriptive study using content analysis techniques.

We chose to experiment with analytic techniques that would permit a conceptual (as opposed to a narrative or other type of synthesis of data or a transformation of findings that would theoretically depict motherhood in the context of maternal HIV infection. One of the most important contributions of qualitative research to evidence-based clinical practice is the development of theories grounded in the particularities of human experience to serve as the basis for theory-based interventions (Sidani & Braden, 1998). Especially prized in the practice disciplines and a forte of qualitative research are situation-specific conceptual renderings enabling “patient-centered interventions” (Lauver et al., 2002).

Creating a Taxonomy of Findings

As a first step in the transformation of the findings into conceptual form, we created a taxonomy of findings, partly shown in Table 2. This taxonomy was developed inductively from the findings and then refined by moving back and forth between findings and taxonomy. Indeed, the idea of developing a taxonomy came from a report in which the authors explicitly presented their findings in terms of the supportive and burdensome aspects of motherhood in the context of maternal HIV infection. We noticed that other findings also suggested such dimensions of contrast, including HIV-related/not-HIV-related, positive/negative impact, and benefits/risks. So, we began outlining the findings and realized we were using a technique Spradley (1979) had described as a particular kind of domain analysis: namely, taxonomic analysis. This kind of analysis is useful for theory development and has much in common with the axial and selective coding associated with grounded theory (Strauss & Corbin, 1998).

The taxonomy we constructed categorizes the findings in two domains—reproductive decision making and the experience of motherhood—by the properties, dimensions, or variations suggested by the findings, no matter what their effect size. Our purpose was not to determine the prevalence or quantitative strength of each finding—our goal in calculating effect sizes—but rather to identify the underlying concepts or conceptual relations signified, but not necessarily explicitly expressed, in the findings. Whereas effect sizes in qualitative research show the quantitative range of findings, taxonomies show the conceptual range of findings and, in outline form, provide a foundation for the development of conceptual descriptions and models, or working hypotheses.

The taxonomy is comprised of items that have different “semantic relations” (Spradley, 1979, pp. 117–118), either within the same or between different categories in each domain. For example, the items in the category reproductive decisions in the reproductive decision-making domain show an X-is-a-type-of-Y relationship (e.g., types of decisions); the items in the category reproductive outcomes in the same domain show an X-is-the-cause/consequence-of-Y relationship (e.g., outcomes of the decision to conceive); and the items in the category justifications show an X-is-a-reason-for-doing-Y relationship (e.g., reasons for having children). The items in the category types of mothering work in the experience of motherhood domain show several semantic relations, including X-is-a-way-to-do-Y (surveillance work), X-is-a-reason-for-doing-Y (information work), and X-is-a-cause/consequence-of-Y (accounting work). This variation reflects both the contents of the findings and the contexts in which they appear in the research reports. For example, the dimension of focus seemed to be the property underlying, and thus the best way to capture, those findings...
Table 2. Taxonomy of Findings Pertaining to Motherhood

I. Reproductive Decision Making

A. Reproductive decisions
   1. Whether to conceive
   2. Whether to continue pregnancy
   3. Whether to terminate pregnancy

B. Reproductive outcomes of reproductive decision making
   1. Decision to conceive
      a. Pregnancy achieved via deliberate efforts
      b. Pregnancy achieved by accident
      c. No pregnancy achieved

C. Factors influencing reproductive decision making
   1. HIV-related
      a. Concern over transmission of infection
      b. Health of mother
      c. Concern for child after mother’s death
      d. Previous experience with HIV+ child
      e. Health care providers’ counsel
   2. Not HIV-related
      a. Importance of motherhood to fulfillment as woman
      b. Completeness of family
      c. Attitude toward and/or availability of abortion
      d. Family and/or other woman’s counsel
      e. Faith and religion
      f. Previous experience with sick child or with child who died

D. Justifications
   1. For having children
   2. For not having children

E. Framework for reproductive decision making
   1. Time
   2. Focus
      a. Child-centered
      b. Woman-centered
   3. Nature of moral reasoning
      a. Contextual (ethics of care)
      b. Absolute (ethics of justice)
   4. Agent
      a. God
      b. Self

II. Experience of Motherhood

A. Impact of motherhood on HIV
   1. Positive impact
      a. Impetus to live
      b. Impetus to self-care
      c. Symptoms improved
      d. Coping improved
      e. Diagnosis of HIV infection
      f. Diminution of stigmatizing and/or mortal effects of HIV
   2. Negative impact
      a. Intensification of physical burdens of HIV
      b. Aggravation of symptoms
      c. Impaired coping
      d. Exposure of HIV status
      e. Intensification of stigmatizing effects of HIV

B. Impact of HIV on motherhood
   1. Positive impact
      a. Impetus to be a better mother

(Continued)
Table 2. (Continued)

II. Experience of Motherhood

b. Impetus to seek medical/prenatal/drug rehabilitation care

2. Negative impact
   a. Shorter time to mother with “death sentence” of HIV
   b. Imposition of deviant status on motherhood
   c. Impaired mother/child relations
   d. Feelings of remorse and/or inadequacy as a mother
   e. Barrier to self-care
   f. Barrier to seeking medical/prenatal care
   g. Impediment to child care
   h. Intensification of physical burdens of motherhood
   i. Offsets joy and life affirmation of pregnancy and children

C. Mothering work

1. Conditions for mothering work
   a. Age of child
   b. HIV status of child
   c. Maternal health status
   d. Temporal orientation
   e. Socioeconomic position of mother
   f. Ethnic/racial position of mother
   g. Relations with health care and social service providers
   h. Access to and utilization of health care and social services

2. Objects of mothering work
   a. The medical body (medical/physical aspects of HIV)
   b. The social body (stigmatizing effects of HIV)
   c. HIV− child
   d. HIV+ child
   e. Self as mother

3. Objectives of mothering work
   a. Protection of children
   b. Preservation of identity as good mother

4. Types of mothering work
   a. Surveillance work
   b. Safety work
   c. Information work
   d. Accounting work
      d1. Calculating the risks/benefits of disclosure of mother’s or child’s HIV status
      d2. Calculating the risks and benefits of ARV/AZT in pregnancy, for child
      d3. Calculating the risks/benefits of seeking mother–child health care
   e. Hope work
      e1. Focus
         e1a. Susceptible child will be seronegative
         e1b. Children will have a good life
   f. Worry work
      f1. Focus
         f1a. Impact of maternal HIV on children
         f1b. Care of children after maternal death
         f1c. Infecting children
         f1d. Quality of life for children
   g. Reconciliation work
   h. Legacy work
      h1. Objectives
         h1a. Preparing children for motherless future
         h1b. Preserving maternal identity while sick and after death
      h2. Conditions
         h2a. Time since diagnosis
         h2b. Severity of symptoms
         h2c. Maternal readiness

Note: This table shows only those items in the complete taxonomy referred to in the narrative text.
pertaining to what we called `hope work` and `worry work`, whereas the dimensions of `objectives` and `conditions` seemed to capture best the findings pertaining to what we called `legacy work`. The depiction of the various activities mothers in these studies performed as `mothering work` was itself derived from the sociological concepts of `work` advanced by Strauss and his colleagues (e.g., Corbin & Strauss, 1998; Strauss, Fagerhaugh, Suczek, & Wiener, 1982, 1985; see also, Star, 1995) and of `work object` advanced by Casper (1998). We came to these concepts because one of us had already recognized their value in interpreting both nursing and patient activities (Sandelowski, 2000).

We also included an item in the taxonomy that was called for theoretically by findings but was not empirically present. That is, in the `justifications` category in the domain of reproductive decision making, all the items referred to justifications “for having” children, which calls for a list of contrasting justifications “for not having” children. Yet no examples of such justifications appeared in the findings. We placed this item in parentheses. A taxonomic arrangement of findings thus can show not only the theoretical properties of findings but also can direct synthesists to what is not there but logically ought to be, potentially allow more penetrating syntheses. For example, we inferred from these “missing” findings that although for women motherhood is typically the fulfillment of a cultural norm requiring no justification, for HIV-positive women it is a deviant act requiring justification.

**Explicit Use of Sustained Comparisons**

Another analytic device with which we experimented was the explicit use of sustained comparisons. We found ourselves using this device implicitly every time we commented to each other—after yet another round of reading the findings—that HIV-positive mothers did not seem so different from mothers in general. Such comparisons involve the deliberate search for similarities and differences between a target phenomenon and some other phenomenon—not addressed in the studies reviewed—with an apparent or perceived resemblance to it. The objective in using such comparisons is to clarify the defining and overlapping attributes of the target phenomenon in order to minimize the likelihood of inflating the uniqueness of a target phenomenon and to maximize recognition of the relationships between phenomena. This work is similar to the examination of “related cases” in Wilsonian concept analysis (Avant & Abbott, 2000, p. 69) and is a form of constant comparison analysis (Strauss & Corbin, 1998). In metasynthesis projects this form of constant comparison analysis always involves taking sets of findings as a whole as the target point of comparison (not, for example, selected participants’ quotations or segments of findings). These comparisons are thus best conducted after the findings in all reports have been reduced into a set of statements or represented in a taxonomy.

Synthesists can experiment with comparisons likely best to showcase and penetrate findings. For motherhood in the context of maternal HIV infection, comparisons can be focused on `HIV status` (HIV-positive vs. HIV-negative mothers); `gender` (HIV-positive women/mothers vs. HIV-positive men/fathers); `place of mothering` (prison, homeless shelter); `procreative status` (HIV-positive childless women vs. HIV-positive mothers); `type of disease` (mothers with HIV disease vs. mothers with cancer); `illness characteristics` (maternal HIV infection vs. other maternal chronic, mortal, stigmatizing, and/or transmissible—infectious or genetic—illness); or, on one or more combinations of these and other foci (e.g., African American vs. Hispanic vs. Caucasian HIV-positive mothers; or middle- vs. working-class HIV-positive mothers). Other potential objects of comparison include “marginalized” women who “mother against the odds” or who are culturally deviant or deemed “bad” mothers, such as mothers in prison, mothers on welfare, and adoptive, homeless, lesbian, minority, and teenage mothers (Coll, Surrey, & Weingarten, 1998). The use of any of these or other objects of comparison has the potential to sharpen and deepen understanding of the common and unique features of motherhood in the context of maternal HIV infection, and of how findings are related to key axes of difference, such as gender, race/ethnicity, socioeconomic class, parity, and type of disease.

The selection of objects for comparison will depend on the interests and expertise of the synthesist, the nature of the findings themselves, and the state of knowledge about those objects of comparison. Some excellent candidates for being objects of comparison will not themselves have been the topic of much formal study, such as motherhood in the context of chronic illness (Radtke & Van Mens-Verhulst, 2001; Thorne, 1990). And most of these objects will not have
been the focus of qualitative metasynthesis because few have been conducted.

For example, we found HIV-negative mothers, or mothers not themselves infected or otherwise directly affected by HIV, to be the most immediately relevant object of comparison. Compared with mothers in the vast literature on Western motherhood with which we are familiar, the HIV-positive women in the studies we reviewed seemed no different in their desire for motherhood, in the opportunities and constraints they perceived as integral to motherhood, and in the work they performed as mothers. Indeed, what struck us repeatedly was that these women’s experiences of motherhood illuminated and even dramatized what motherhood typically means and entails for any woman. Although HIV infection posed a unique mortal and social threat to these mothers, HIV infection also intensified the benefits and burdens already associated with motherhood (e.g., Hays, 1996). No matter what their health status or social circumstances, women generally want to become mothers; they derive joy from their children, worry that they are not good enough mothers, work to protect their children from harm, and strive, often against great odds, to ensure happy and healthy lives for their children.

When compared with the mothers with other chronic illnesses who participated in Thorne’s (1990) study, the HIV-positive mothers who participated in the studies we reviewed also expressed concerns about the effects of their disease on their ability to perform as mothers and to their reliance on their children for social support. Like the middle- and working-class mothers in McMahon’s (1995) study of motherhood, these HIV-positive women found in motherhood an opportunity for self-transformation. Like the “deviant” mothers in the Coll et al. (1998) anthology on motherhood, these HIV-positive women could not escape the prevalent idea that they were bad mothers.

If we were to continue in this vein of comparison here, we would ultimately be able to draw some conclusions about what the findings on motherhood in the context of maternal HIV infection reveal about motherhood and HIV infection as related entities and as entities each related to other axes of difference. This work might then be shown in a series of Venn or other diagrams emphasizing relationships that, in turn, could lead to a comprehensive conceptual description, set of working hypotheses, or model development.

**Translating In Vivo Concepts**

Another analytic device we used involved those reports in which a central concept constituted the findings. Six reports contained such conceptual synthesizes (Barnes, Taylor-Brown, & Wiener, 1997; Ingram, 1996; Ingram & Hutchinson, 1999a, 2000; Valdez, 1999; Van Loon, 2000). The key concept in the Barnes et al. (1997) report was “eternal motherhood”; in the Ingram (1996) and Ingram and Hutchinson reports (1999a, 2000), “defensive motherhood”; in the Valdez report (1999), “la protectora,” or protective motherhood; and, in the Van Loon report (2000), “redefined motherhood.” For synthesists and other reviewers of research reports, these are in vivo concepts, as they constitute researchers’ (not research participants’) representations of the data they obtained from research participants. Such concepts lend themselves to metasynthesis by “reciprocal translation.” In reciprocal translation synthesists focus on the in vivo concepts, metaphors, or other such interpretive devices by which researchers synthesized their data, using them to determine whether and how they can be translated into each other to produce a metasynthesis of findings across all studies in a domain of inquiry (Noblit & Hare, 1988). In contrast to comparisons between a target phenomenon (i.e., motherhood in the context of maternal HIV infection)—as represented in synthesists’ reduction of findings across research reports—and other phenomena not addressed in these reports (i.e., motherhood in other contexts), reciprocal translation entails comparing the conceptual synthesizes in individual reports.

As indicated in the sets of findings shown in Table 3, the concepts of eternal and redefined motherhood share HIV-positive women’s efforts to fulfill what they perceived to be the norms of good mothering even when they were physically unable to fulfill them. Eternal motherhood signifies mothering after maternal death. Via the videotapes they created for their children, the HIV-positive mothers in the Barnes et al. study (1997) hoped to create a lasting mothering presence. If not present in the flesh, they could be eternally present on videotape. Van Loon’s (2000) concept of redefined motherhood captures a similar effort by HIV-positive women to bypass the physical requirements of motherhood. The HIV-positive mothers who participated in her study could no longer care for their children because the severity of their disease or substance abuse had forced them to relinquish the care or custody of their children to others. Like mothers who have died,
<table>
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<tr>
<th>Author, Year</th>
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<tbody>
<tr>
<td>Barnes et al., 1997</td>
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<tr>
<td>Eternal motherhood</td>
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<tr>
<td>Conceptual Synthesis</td>
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<tr>
<td>Videotapes are a means to leave a legacy to children</td>
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<tr>
<td>Mothers choose how they will present themselves</td>
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<td>These videotaped legacies are stories in which they give gendered advice, disclose personal secrets, and express guilt</td>
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<tr>
<td>The concept contextualizing these stories is “eternal mothering”</td>
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<tr>
<td>Mothers in this study warned their children about how to avoid mistakes the mothers had made, emphasizing the role gender played in their lives and how it shaped their choices and regrets and, therefore, warnings</td>
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<tr>
<td>Mothers warned their noninfected children about AIDS as a deadly disease</td>
</tr>
<tr>
<td>The disclosure of HIV/AIDS was not the primary secret shared by the mothers</td>
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<tr>
<td>Mothers demonstrated a concern that by disclosing their HIV status they might be transferring the potential stigmatization associated with HIV/AIDS to their children</td>
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<tr>
<td>Some women reported that telling their HIV status to their children face to face was one of the most difficult parts of the disease process</td>
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<tr>
<td>Universal to mothers was the guilt for not being the ideal mother as defined by themselves, and their perception of cultural expectations</td>
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<tr>
<td>Mothers addressed their guilt for their mothering, and the stigma associated with AIDS</td>
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<tr>
<td>Mothers attempted to diminish the negative impact of their HIV/AIDS status and life choices and to free their children from feeling shame</td>
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<tr>
<td>Most mothers expressed regrets about aspects of their mothering</td>
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<tr>
<td>There was an eternal aspect of their mothering characterized by anticipating future events, giving advice for life, and promising to be eternally available in spirit, even after their physical death</td>
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<td>Eternal mothering, as embodied in videotapes, meant mothering does not end at maternal death</td>
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<tr>
<th>Ingram, 1996; Ingram et al., 1999a, 2000</th>
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<tr>
<td>Defensive motherhood</td>
</tr>
<tr>
<td>Conceptual Synthesis</td>
</tr>
<tr>
<td>HIV+ women face a double bind, in which women are supposed to want motherhood and become mothers, but not if they are HIV+</td>
</tr>
<tr>
<td>Women struggled with the social ambivalence directed at them as mothers</td>
</tr>
<tr>
<td>HIV made it hard for women to fulfill the social expectations of mothering</td>
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<tr>
<td>Stigma set the stage for defensive mothering</td>
</tr>
<tr>
<td>Mothers engaged in defensive mothering, which involved strategies to prevent the spread of HIV and stigma, prepare children for a motherless future, and maintain a positive attitude</td>
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<tr>
<td>Mothers assumed a defensive posture as they worked to prevent the spread of HIV and its concomitant stigma</td>
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<tr>
<td>Preventing the spread of HIV and stigma involved hypervigilant monitoring and the safety work of teaching</td>
</tr>
<tr>
<td>Mothers taught children about avoiding blood and body fluids and using gloves</td>
</tr>
<tr>
<td>Mothers taught their children about transmission of HIV through unprotected sexual contact</td>
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<tr>
<td>Mothers feared a courtesy stigma directed at their children</td>
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<tr>
<td>Mothers monitored the threat posed by the stigma of HIV</td>
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<tr>
<td>Despite advances in the treatment of AIDS, mothers viewed HIV as a death sentence</td>
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<tr>
<td>At the heart of the mothers’ defensive posture were their defenseless children, who faced a motherless future</td>
</tr>
<tr>
<td>Mothers shared their values with their children</td>
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<td>Mothers emphasized the importance of loving relationships</td>
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<tr>
<td>Mothers taught children about practical topics</td>
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<td>Mothers felt the temporal urgency of their situation</td>
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<td>Mothers wrote letters with information for younger children</td>
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<tr>
<th>Author, Year</th>
<th>Conceptual Synthesis</th>
<th>Statements of Findings</th>
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<tr>
<td>Valdez, 1999</td>
<td>Protective motherhood</td>
<td>Mothers found it difficult to make custody arrangements for children, especially HIV+ children. Despite widespread anxiety about custody, none of the mothers had legal documentation about their wishes concerning custody of their minor children in the event of their deaths. Fear of stigma and its repercussions inhibited mothers from building supportive relationships for their children after their death. Although all mothers sought out resources to assist them with legal arrangements for their deaths, none had legal documentation because they considered such documentation a symbol for giving up and accepting death. Mothers sought to leave a positive legacy to their children. Most mothers worked to leave special memories about the mother–child relationship in accounts of shared experiences, photo albums, video recordings, or written cards and letters. The ravages of HIV weakened the mothers’ ability to mother physically and emotionally. Mothers lived in fear of being discredited as mothers by themselves and others because of their HIV+ status. Mothers worked to strengthen and maintain their mental well-being for their children. Children were a reason to live and a focus for life. Mothers engaged in strategies to maintain a positive attitude and to avoid negativity, including support groups. Most mothers spoke of their hopes for a cure, especially mothers of HIV+ children. Pregnancy and children became the impetus that appeared to take the women to “ofrecer.” Ofrecer is “an offer to changed” and is characterized by a woman’s negotiating with God on behalf of her child. The Hispanic woman during the ofrecer stage promised to do good, namely, to live for her child and reveal her status to benefit others. Her exchange was not for herself or for more time alive but, for the life of her child. Despite lack of disclosure to children, most women had made arrangements for their children after their death. Most women left significant family members with detailed instructions on the disposition of the children. Other women wrote lengthy letters to each of their children, to be given to them death. Other women hoped they would live long enough for their children attain an age at which they would be made able to tolerate the news. Some women expressed fear of disclosure more for their children and families. Day to day women cared for families while struggling with their own physical and emotional well-being. Women’s strength to live came partly from being mothers. Women saw their lives as important because they had to care for their children and their families. When faced with death, women chose the path of living for their children rather than accepting that they were going to die. The decision to live and emerge as la protectora was influenced by the birth of a child and the revelation of a child’s negative status.</td>
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Table 3. (Continued)

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<th>Conceptual Synthesis</th>
<th>Statements of Findings</th>
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| Van Loon, 2000       | Redefined motherhood | All but one of the women reported that motherhood was their most important role  
Mothers recognized difficulties in child rearing and relationships with children because of to HIV  
Mothers focused greater attention on the benefits of having children and the supportive functions served by children  
Despite changes in physical status from AIDS, most mothers continued to act as caregivers to their children  
When physical decline hindered their ability to perform certain functions associated with motherhood or when their children no longer lived with them, women redefined the role of mother  
By altering the meaning of motherhood, they were able to retain the role and the status and satisfaction that role provided  
The women defined the role of mother broadly to include education, emotional support, discipline, physical care, involvement in the children’s activities, and financial responsibility  
Mothering was affected by both changes in health status and issues unique to AIDS  
Changing health status made some tasks associated with motherhood more difficult to perform, particularly those involving physical exertion  
Mothers also had to negotiate special concerns associated with AIDS, such as stigma and isolation, ways their illness might affect their children’s well-being, and the impact of widespread loss in the family’s social network  
Mothers tried to protect their children from HIV-related stigma  
Mothers tried to prevent isolation of their children  
Mothers knew that living with a sick mother could be emotionally troubling for children  
The effect of widespread loss from AIDS was another concern for these mothers  
Mothers reported frustration and difficulties in dealing with their children  
But the benefits of motherhood outweighed the burdens  
Mothers looked to their children for practical help, emotional support, and, most important, motivation  
Changing health status limited role performance for some mothers and had already resulted in placement of their children with others  
All mothers were aware that others would need to assume responsibility for their children if they died and had thought about plans for their children’s future  
Most mothers had plans in progress, either making informal arrangements with relatives or working with agencies to formalize future adoptions  
To retain the maternal role in the face of threats to motherhood, mothers redefined motherhood, emphasizing tasks that could be maintained despite changing health status and, when those tasks could no longer be performed, reframing the role of mother as one of oversight of children’s well-being  
Drug-abusing women struggled to define relationships with children who had been placed out of the home  
Mothers reported troubled relationships with adult children  
Troubled relations with adult children appeared in women with drug-use histories whose children had been neglected earlier in their lives and in women who were emotionally closer to younger children because of the constraints of their illness |
such separated mothers are not in physical proximity to their children and therefore cannot directly care for them. In all these circumstances motherhood cannot be accomplished except in the virtual sense: by proxy, remotely, or at a distance.

The concepts of defensive motherhood (Ingram, 1996; Ingram and Hutchinson, 1999a, 2000) and of la protectora (Valdez, 1999), a depiction of HIV-positive Hispanic women as protective mothers, encompass HIV-positive women’s efforts to protect their children from contracting HIV and from suffering the effects of the stigma associated with HIV and to prolong and maximize the quality of the lives of their HIV-positive children. Like Ingram’s (1996) defensive mother, Valdez’s (1999) protective mother is defending her children against the mortal and social consequences of HIV infection.

A reciprocal translation that embraces the in vivo concepts of eternal, redefined, defensive, and protective motherhood is virtual motherhood. One of us came to the idea of virtual motherhood because of her previous sensitization to issues relating to virtual reality and embodiment in her studies of reproductive and imaging technology (e.g., Sandelowski, 2000, 2002). Virtual motherhood conceptually brings together all the circumstances in which the HIV-positive mothers who participated in the studies we reviewed were physically separated from their children (by death, imprisonment, and care or custody arrangements) or otherwise unable to perform as good mothers. The deficits they perceived in their maternal performance generated diverse activities (e.g., creating material mementos for their children, seeking reconciliation with children poorly mothered in the past) to remain mothers to their children and to preserve their images of themselves, as well as their children’s images of them, as good mothers. Virtual motherhood is the kind of motherhood that can transcend the mortal body and any presumed sins of the flesh.

Virtual motherhood also encompasses Goffman’s notion of “virtual identity” (1963, p. 19). Goffman referred to the discrepancy that exists between stigmatized persons’ actual identity—the one they possess by virtue of some culturally deviant condition—and their virtual identity, or the normal or culturally prescribed identity they would ordinarily have and to which they aspire. We came to this concept because we were already familiar with Goffman’s classic work on stigma and because his work was referred to in several of the reports we reviewed. HIV-positive mothers’ efforts to preserve their identities as good mothers are a response to what Ingram (1996) and Ingram and Hutchinson (2000) referred to as the “double bind” of motherhood in the context of maternal HIV infection: HIV-positive women fulfill the cultural mandate for all women to become mothers but find that the very act of fulfilling it leads to further stigmatization. Having actual identities as “bad” and “guilty” women in large part because they chose to become mothers (and thereby to risk transmitting infection to their “good” and “innocent” children), they struggled to achieve or preserve virtual identities as good mothers. Virtual motherhood is thus a reciprocal translation that grabs the distinctive mortal and social features of HIV disease by encompassing mothering in the physical absence of the mother and in the social presence of stigma. The concept of virtual motherhood embraces another life and an afterlife for HIV-positive mothers that transcend both the mortality and stigma of HIV infection, in which children are never motherless, mothers are never childless, and mothers are always good. The HIV-positive women in the studies reviewed here found in motherhood not only a reason to live but also a way to live forever.

Using Imported Concepts

Our use of Strauss’s concept of work (Strauss et al., 1982, 1985) to re-present the various activities in which the women participants engaged and of Goffman’s (1963) concept of virtual identities to produce the reciprocal translation of the in vivo (or researchers’) concepts of defensive, eternal, protective, and redefined motherhood also illustrates the use of imported concepts as analytic tools for metasynthesis. We use the term imported concepts here to refer both to researchers’ use of concepts they did not themselves generate to interpret their data and to synthesists’ use of these same concepts to produce a metasynthesis of findings across studies. From the vantage point of synthesists, an imported concept can also be an in vivo concept when researchers make someone else’s concept their own by using it to reframe the understanding of a target experience. For example, we found that Ingram’s (1996) and Ingram and Hutchinson’s (2000) use of the psychiatric concept of the double bind to interpret the conditions leading to defensive motherhood encompassed well the dualities, contradictions, paradoxes, and ironies of motherhood in the context of HIV infection as these were depicted in the findings across studies. Indeed, Ingram’s dissertation (1996) on motherhood in the context of maternal HIV infection
(from which her articles with Hutchinson were derived) is an excellent example of how a single work can encompass conceptually most of the key findings in a target area. But synthesists can only see this after they have begun the work of combining findings in that area.

Ingram’s (1996) use of the imported concept of double bind in her studies helped us to see the duality, contradiction, paradox, and irony conveyed but not necessarily explicitly expressed in the findings of the other studies. Indeed, the findings suggest that motherhood in the context of maternal HIV infection exemplifies the cultural contradictions inherent in Western motherhood of being both redeeming and damning (Hays, 1996; Mcmahon, 1995; Thurley, 1994; Weingarten, Surrey, Coll, & Watkins, 1998). Findings pertaining to both the benefits and liabilities of motherhood typically appeared in the same studies, suggesting the dual, inconsistent, and conflicting positions of motherhood in the context of maternal HIV infection.

CONCLUSION

The purpose of this article was methodological—to detail several of the devices we used to produce a metasynthesis of qualitative findings. It is not intended to be a comprehensive report of the results of any metasynthesis per se. Such methodological details are still lacking in qualitative metasynthesis literature, and in fact we hope to present a comprehensive metasynthesis of findings pertaining to motherhood in the context of maternal HIV infection in a future article.

All the findings in the reports we reviewed were researchers’ representations of the lives of HIV-positive women as they interpreted them from the data they obtained from these women. Indeed, a key feature in all 99 studies in our bibliographic sample was the researcher claim to having achieved direct access to HIV-positive women’s point of view. But the actor whose point of view with whom the synthesist is in most direct contact is that of the researcher, not the participant. Any qualitative metasynthesis of findings thus constitutes an interpretation at least three times removed from the lives represented in them: it is the synthesist’s interpretation of researchers’ interpretations of research participants’ interpretations of their lives. Clarifying the analytic devices used to create such metasyntheses thus becomes essential to demonstrating that despite being far away from participants’ lives-as-lived, these interpretations still remain close to their lives-as-told (Bruner, 1984).

REFERENCES


*References marked with an asterisk indicate reports included in the bibliographic sample of the metasynthesis project with findings pertaining to motherhood.


3Identical sample but different investigators.

4Identical sample.


Identical sample.