



# Metasynthesis: issues of empirical and theoretical context

Julius Sim<sup>1</sup> · Anne Marit Mengshoel<sup>2</sup>

Accepted: 18 July 2022  
© The Author(s) 2022

## Abstract

Metasynthesis is an approach to synthesizing primary qualitative research, and may take either an aggregative or an interpretive approach. In either case, the resulting synthesis inevitably occurs at a remove from both the empirical and the theoretical contexts of the original research. We argue that seeking to retain these contexts in the synthesis poses specific challenges. Thus, the empirical context of an original study and the individuality of participants' first-order accounts will be incompletely and selectively represented in a published study, and will be further out of reach at the level of synthesis. Syntheses should therefore be faithful to, but not seek to reproduce, the empirical context of the primary studies. As regards theoretical context, accommodating the concepts and the broader theoretical frameworks of primary studies may require potentially divergent philosophical assumptions to be reconciled with each other and with the theoretical standpoint of the synthesist. Selecting studies where these assumptions are compatible, at the level of both theory and methodology, may lessen this challenge. Some metasyntheses seek to integrate not just concepts but also theories (metatheorizing), but here the challenges of philosophical and theoretical compatibility are more acute, and the means of achieving such integration appear to be underdeveloped.

**Keywords** Qualitative methods · Metasynthesis · Qualitative synthesis · Theory · Context

## 1 Introduction

Metasynthesis is an increasingly popular means of synthesizing qualitative research findings, with the aim of achieving insights of greater scope, generalizability, conceptual development or practical usefulness than can be attained in any individual primary study (Campbell et al. 2003; Thorne et al. 2004; Malterud 2019).

---

✉ Julius Sim  
j.sim@keele.ac.uk

<sup>1</sup> School of Medicine, Keele University, Keele ST5 5BG, Staffordshire, UK

<sup>2</sup> Department of Interdisciplinary Health Sciences, University of Oslo, 0317 Oslo, Norway

Several different methods of synthesis exist under the umbrella heading of metasynthesis: meta-ethnography, thematic synthesis, critical interpretive synthesis, metastudy, and various others (Barnett-Page and Thomas 2009; Booth et al. 2016; Saini and Shlonsky 2012).<sup>1</sup> However, underlying these different methods are two broad approaches: *aggregative synthesis* and *interpretive synthesis* (Paterson 2012; Malterud 2019). In aggregative metasynthesis—exemplified by methods such as meta-aggregation (Hannes and Lockwood 2011) and metasummary (Sandelowski and Barroso 2007)—the concern is to generate a largely descriptive mapping and categorization of findings in a comprehensive range of relevant primary qualitative studies, looking for patterns and commonalities. The concepts utilized in an aggregative synthesis are assumed to be ‘largely secure and well specified’ (Dixon-Woods et al. 2005: p. 46), and the meaning of such concepts is therefore not normally the analytical focus of the synthesis. Instead, the focus is often a practical or instrumental concern, such as developing or evaluating healthcare interventions through what are referred to as ‘lines of action’ (Hannes and Lockwood 2011). In contrast, interpretive synthesis is exemplified by methods such as meta-ethnography (Noblit and Hare 1988) and grounded formal theory (Kearney 1998, 2001a), and conducts the synthesis at a higher level of abstraction. It consists of a conceptual or theoretical process in which new insights are developed, rather than a descriptive account of the phenomenon of interest (Dixon-Woods et al. 2005), and is not so directly oriented to issues of practice or policy.<sup>2</sup> Broadly, interpretive synthesis reflects Strike and Posner’s (1983: p. 346) view of synthesis as ‘conceptual innovation’, which they define as ‘the invention or employment of concepts not found in the parts as means of creating the whole’, and as involving ‘a reconceiving of the assumptions under which the research was done’ (p. 359).

In both approaches, the primary qualitative studies and subsequent metasyntheses move progressively away from the original empirical data, and this is represented by different levels of construct. Research participants frame their accounts in what Schutz (1963) calls first-order constructs. When subsequently analysed by the researcher, these are transformed into second-order constructs: ‘constructs of the constructs made by the actors on the social scene’ (Schutz 1963: p. 242). Development or elaboration of interpretations or theory by the study authors will accordingly be in terms of these second-order constructs. In the process of synthesis, these second-order constructs are, by extension, transposed into third-order constructs. This process of synthesis therefore takes place at a remove both from the empirical context of the data collection in the original studies and from the higher-order interpretation of these data by the authors of these studies.<sup>3</sup>

<sup>1</sup> Some commentators use metasynthesis to refer to a particular approach to synthesis, rather than as an umbrella term as we do, and some favour ‘qualitative evidence synthesis’ as the generic description (Booth et al. 2016). Finfgeld (2003), Sandelowski and Barroso (2007), Thorne (2017) and Bergdahl (2019) propose that the term metasynthesis should be reserved for syntheses with a strong interpretive orientation, whereas in contrast, Major and Savin-Baden (2010) associate it with an aggregative approach. Paterson et al. (2001) use the term in a specific sense within their account of metastudy, to be considered in due course. See Britten et al. (2017) for a discussion of nomenclature.

<sup>2</sup> Although methods such as meta-aggregation are described by some of its proponents as interpretive (Pearson et al. 2005, 2011; Lockwood & Pearson, 2013), they do not involve the type of (re)conceptualizing, and the view of knowledge as socially constructed, that broadly characterize the interpretive tradition in social science. This somewhat thin version of interpretation is reflected in the claim by its adherents that meta-aggregation does not seek to re-interpret the findings of primary studies (Hannes and Lockwood 2011; Pearson et al. 2011).

<sup>3</sup> Toye and colleagues (2017, 2019) have recently described a synthesis of syntheses, which they term ‘mega-ethnography’. They note that this type of synthesis introduces fourth-order constructs – the interpretations of the interpretations presented in the extant meta-ethnographies being synthesized. This additional

An important issue, therefore, is how the empirical and the conceptual or theoretical contexts of primary qualitative studies are taken account of or preserved in the process of synthesis.<sup>4</sup> We will explore this question by focusing on the different types and levels of interpretation, in relation to both data and theory, that occur between the original data and a synthesis and discuss these issues in relation to different approaches to metasynthesis.

## 2 The issue of empirical context

Major and Savin-Baden (2010: p. 15) claim that metasynthesis can preserve the empirical detail of the original studies: ‘Through retaining some of the dense description of the original data, the broader picture provides some detail that conveys the experiences of the original participants.’ Weed (2008: p. 22) argues that because ‘the move from the specific to the generic will result in the loss of some individual differentiations... the synthesis method should be constructed to allow for as much detail of individual cases to be carried as far through the synthesis as is possible.’ However, Sandelowski and Barroso (2007: p. 18) take a rather different view, arguing that although interpretive metasyntheses are ‘faithful to the findings in each report’, they provide ‘interpretive transformations far removed from these findings,’ and Suri and Clarke (2009: p. 406) similarly maintain that in a synthesis ‘some of the rich contextual information found available in reports of primary research [will] be sacrificed.’ This perspective poses a potential challenge to any view of metasynthesis that sees it as a means of representing the empirical world, and we will argue that this is a persuasive challenge.

During data collection, researchers in primary studies have access to participants’ accounts in full and also to the specific social context in which these accounts were obtained, particularly if the data analyst had also collected the data at first hand. Some parts of these accounts are directly accessible to the reader of a report through illustrative quotations and other information (e.g. details of participants’ demographic or other biographical characteristics and their social circumstances) may provide further context. Data may also provide information on the broader social, community or institutional context in which the study was set. This contextual detail contributes to providing a ‘thick description’ of a social phenomenon. Based on a distinction drawn by Ryle (1971), Geertz (1973) described a thick description as one that goes beyond a purely factual or descriptive account of what people have said or done and seeks to express the underlying meaning and motivation of these words and actions, and the social context in which they occurred. A similar notion of the dependence of meaning on context is expressed by Mishler (1979: p. 2):

We rely on context to understand the behavior and speech of others and to ensure that our own behavior is understood, implicitly grounding out interpretations of motives and intentions in context.

---

Footnote 3 (continued)

remove from the context of the original studies suggests that the challenges identified in this paper will, *a fortiori*, be magnified in mega-ethnography.

<sup>4</sup> We are not referring to the empirical context as a component of the data that may be synthesized in the review process, in the way discussed by Booth et al. (2019) in relation to complex interventions. Rather, we are thinking of empirical context in terms of framing the meanings that are conveyed in the findings of primary qualitative studies.

However, this sense of descriptive richness is not available in its entirety to the synthesist or other reader of a primary qualitative study, as the data presented in a report are inevitably selective and the reader does not have first-hand familiarity with the context in which they were collected. Similarly, whilst the primary researcher may endeavour to preserve the individuality of participants' accounts, some of this individuality will inevitably be lost—particularly in a broadly thematic approach to analysis, if less so in a more narrative approach. If, as Atkins et al. (2008: p. 7) claim, 'the intention of a synthesis is to retain the rich context of the data', this may be hard to achieve. A further issue, identified by Thorne et al. (2002: p. 445–446), is that the primary data quoted by authors may encourage a distorted interpretation by virtue of having been chosen to present the most 'graphic, vivid and touching examples to bring the ideas alive to their readers', or may have been derived from 'only one or two particularly articulate and colorful participants.' Moreover, not all of the *findings* of a qualitative study are necessarily contained within the quoted *data*; they may be conveyed indirectly in the researchers' textual account of what was heard or seen. There are therefore difficulties in retaining empirical context at the level of primary studies, even before questions of synthesis are addressed.

Descriptions of metasynthesis commonly describe it in terms of a summary or integration of the findings of primary qualitative studies rather than a secondary analysis of the original data (e.g. Zhao 1991; Zimmer 2006; Sandelowski and Barroso 2007; Finfgeld-Connett 2018). Nonetheless, the original data do appear to feature in various ways in some forms of metasynthesis. The method of meta-aggregative synthesis developed by the Joanna Briggs Institute makes use of the original data to assess the rigour of the findings extracted from these studies, which are designated in the Institute's manual, in rather stark terms, as either 'unequivocal', 'credible' or 'unsupported' according to the adequacy of these data (Lockwood et al. 2020). Here, the data within the original studies are not proposed as the subject matter on which the synthesis should operate, but as a means of validating the findings of these studies by demonstrating their origins (Pearson et al. 2011). To this extent, the empirical context of the primary studies plays a confirmatory role, rather than being the material on which the synthesis is conducted.

Other approaches to metasynthesis appear to give the original data quoted in the primary studies a more central role in the analysis. Major and Savin-Baden (2010: p. 50) argue that the primary research reports used in a qualitative synthesis should 'contain qualitative data rather than summaries of themes' and that the data thereby used in the synthesis should take the form of 'thick quotations/descriptions from the primary data set.' They further note (2010: p. 54) that the number of reports included in the synthesis should 'provide sufficient original data for analysis.' Similarly, Finfgeld-Connett (2010) suggests that focusing on direct quotations from research reports serves to offset the removal of the synthesis from the original data. Many metasyntheses (e.g. Smith et al. 2005; Lindahl and Lindblad 2011; Uhrenfeldt et al. 2013; Fegran et al. 2014; Honein-AbouHaidar et al. 2016; Holt et al. 2017; Kersey et al. 2022) use quotations from participants in the primary studies in direct support of their interpretations. Holt et al. (2017) go further, however, and seem to base their own synthesis predominantly on extracted quotations from such studies. In a similar way, Smit et al. centre their synthesis of experiences of breast cancer on the quoted data in the primary studies before focusing on the authors' analyses of these data and complain that 'it was challenging to code studies without referring to the original authors' interpretations of the respective quotation' (Smit et al. 2019: 242). Thomas and Harden (2008) do not draw a firm distinction between the original data and the researchers' findings in the original studies and use both in their method of thematic synthesis, which incorporates

the principles embodied in thematic analysis of primary qualitative data (Braun and Clarke 2022). Pilkington et al. (2020) also use both data and findings in their meta-ethnography but distinguish these in terms of the analysis of first- and second-order constructs, respectively.

Using data presented in the primary studies as an element within the synthesis does not, however, take us very far in terms of capturing the original empirical context, given the selective availability of such data and lack of first-hand contact with the context of data collection suggested earlier. Moreover, a synthesis that is centred on the data quoted by the authors of research reports risks mistaking the function of quotations in qualitative research reports. This function is more one of *exemplifying* the meanings that underlie the data, than of *expressing* such meanings; data that are suitable for the purpose of illustration are not necessarily optimal for the purpose of interpretation. It is reasonable to insist that meaning should be *grounded* in the data, but unless one adopts a strongly realist stance this does not imply that meaning is wholly *contained* within the data, as it derives in part from other elements in the process of analysis that are at a higher level of abstraction. As Paley (2017: p. 116, original emphasis) puts it:

Meaning is not a *property* of anything. It is not resident in the text... Meaning is what the analyst brings to the data; it is not *in* the data, awaiting discovery... Meaning only arrives when a theory is applied to the phenomenon concerned, and an inference is made on that basis.

Accordingly, the greater the reliance on the original data in the studies included in the synthesis, the more the synthesis will fail to capture the insights drawn by the authors of these studies. What will result is not so much a synthesis as a re-analysis of these data, as occurs in secondary qualitative data analysis (Heaton 2008).

Furthermore, as metasynthesis seeks to provide a greater degree of conceptual abstraction (in its interpretive form) or a summary or mapping of findings (in its aggregative form), this logically necessitates a distancing from the specific empirical detail in the primary studies. For Zimmer (2006: p. 315), this raises a concern:

The theorizing engaged in by the synthesist removes the findings of the constituent studies from the richness of the primary description and its intended impact. This raises the question of as to [sic] whether this abstracting process in qualitative meta-synthesis actually violates the tenets of the interpretive paradigm within which the constituent studies are philosophically situated.

Similarly, Paterson et al. (2001: p. 15) identify as a limitation of metasynthesis that it 'decontextualizes data, removing them from the emotional and physical context within which they were originally constructed.' If the process of interpretation is seen as lying at the level of the rich empirical detail and thick description provided by primary qualitative studies, these are valid concerns. However, if we consider what occurs during a metasynthesis, the interpretation that takes place is at a higher and more abstract level, and we should not expect this empirical richness to be carried through. Here, interpretation is not in terms of understanding the detail of specific first-person accounts but has to do with a higher-order form of interpretation that we expect to be conceptually, rather than empirically, rich—at least in interpretive, if less so in aggregative, metasyntheses. So it is to more conceptual issues that we now turn.

### 3 The issue of theoretical context

#### 3.1 Concepts and theories

It is important initially to define and distinguish concepts and theories and the way in which they indicate different levels of abstraction. In broad terms, a concept is an abstract description of some feature or property of what we perceive or experience in the world around us. Whilst phenomena in the empirical world are observable, concepts, by virtue of their abstract nature, are not directly observable but are inferred from, or applied to, these phenomena. They thereby provide a mental image of, or give a meaning to, such phenomena, and help us to move from describing to understanding the world. Concepts are regarded by Goertz (2006: p. 5) as ‘ontological’, insofar as they are ‘about the fundamental constitutive elements of a phenomenon.’ They also relate most strongly to the essential, rather than the superficial or ‘accidental’, properties of things in the world (Goertz 2006).<sup>5</sup>

The *extension* of a concept is the class of observable phenomena to which it applies, whilst the *intension* of a concept refers to the properties that a phenomenon must possess to lie within the concept’s extension (Salmon 1963). The intension of a concept thereby defines its meaning (Sartori 2009a), and this meaning depends upon some sort of implicit or explicit theoretical stance—whether this is a set of initial theoretical assumptions or a more fully developed theory—such that a concept with the same name may have different meanings in different theories (e.g. ‘conflict’ may have a different meaning in a particular psychological theory from its meaning within a theory in political science, just as ‘culture’ will differ in its meaning between anthropological and organizational theory). Equally, in some instances a concept may have a similar meaning in different theories; for example, within different theories of attitude formation, the concept of an ‘attitude’ may be similar, even though theoretical accounts of how attitudes are formed are distinct (Maio and Had-dock 2010).

Theories are therefore framed in terms of concepts but lie at a further level of abstraction. They contain statements as to the interrelationships between such concepts, in terms of theoretical propositions that make up the theory as a whole (Hoyle et al. 2002). Maxwell (2013) suggests that a single proposition linking two concepts could constitute a theory, but theories are commonly more complex than this and consist of an interlinked series of such propositions within an explanatory framework. Importantly, Bulmer (1984: p. 43) points out:

Concepts in themselves are not theories. They are categories for the organisation of ideas and observations. In order to form an explanatory theory, concepts must be interrelated... Concepts, then, mediate between theory and data.

It follows that whilst concepts refer to some sort of theoretical context, reference to one or more concepts does not in itself constitute a theory unless these concepts are set

<sup>5</sup> Concepts are sometimes referred to as constructs. It is not straightforward to draw a clear distinction between the two terms. However, Kerlinger (1986) suggests that constructs are concepts that have been specifically invented or adopted for a particular scientific purpose; in this way, they may differ from concepts that have a more general meaning outside a discipline. The term construct may also be used when referring to the way in which, or the levels at which, concepts are created or negotiated, such as in Schutz’s (1963) use of the term noted earlier, or in relation to the idea of social constructionism (Burr 2015). It is also a term preferred in the context of psychometrics (Nunnally & Bernstein 1994).

in certain relationships. This process of examining, developing and interrelating concepts may be regarded as *theorizing*, with *theory* as the end product (Swedberg 2012, 2016).

Theories can be seen as existing within a particular *paradigm*. Developed by Kuhn (1970), this term refers to a set of philosophical assumptions about the nature of the world (ontology) and how we can appropriately gain knowledge or understanding about it (epistemology). Blaikie and Priest (2017) describe, as examples, the neo-positivist, interpretive, and critical realist paradigms. As each paradigm will make different philosophical assumptions, Kuhn (1970) saw them as incommensurable; even if paradigms are not wholly incompatible in this way, they will nonetheless each contain certain philosophical assumptions that cannot be reconciled with those of another paradigm.

### 3.2 Concepts, theories and metasynthesis

The second-order constructs within which data analysis is framed in primary qualitative studies provide a conceptual context for the insights developed by the authors of these studies. Even if a study is not set explicitly in a theoretical context, the analysis that occurs within it will draw upon what we have referred to as an implicit theoretical stance; for example, through a decision to code this sentence rather than that, or to code it in the same or a different way in relation to another sentence. Moreover, even before any clearly defined theoretical concepts have been identified, what Blumer (1954: p. 7) calls sensitizing concepts will provide ‘a general sense of reference and guidance in approaching empirical instances.’ For Seale (1999: p. 26), knowledge is always ‘mediated by pre-existing ideas and values, whether this is acknowledged by researchers or not.’ These ideas and values do not mean that a specific *theory* must always predate any attempt to collect data; this would seem to deny the possibility of theory-building research, restricting the role of research to elaborating, refining or testing a pre-existing theory. Rather, it says that the researcher must take a perspective that embodies certain conceptual or theoretical assumptions, reflecting the particular paradigm within which he or she is working.<sup>6</sup>

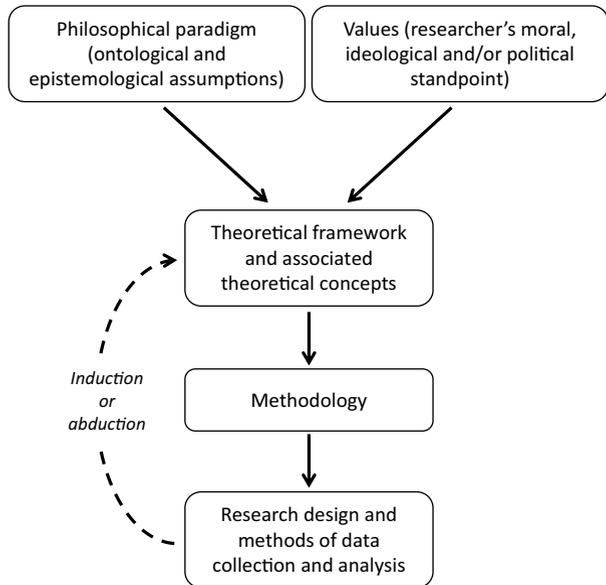
So, a theoretical context of some type exists in a primary study, even if only at an implicit or underdeveloped level to guide data collection, but in what way should it be—and indeed, need it be—accommodated within the metasynthesis?

### 3.3 Interpretation at the level of the synthesis

As we have argued earlier, analysis within metasynthesis should take as its raw material the second-order constructs identified in the primary studies. It may, for example, take the form of a thematic synthesis (Thomas and Harden 2008), or the sorting of coded data into an a priori structure within framework synthesis (Oliver et al. 2008), or the processes of reciprocal and refutational translation conducted in meta-ethnography (Noblit and Hare

<sup>6</sup> In this connection, note that in the context of describing grounded theory as a method of constructing theory, Glaser and Strauss (1967: p. 3) are clear that ‘the researcher does not approach reality as a *tabula rasa*. He must have a perspective that will help him see relevant data and abstract significant categories from his scrutiny of the data.’ Similarly, Glaser (1978) argues that a prior sense of ‘theoretical sensitivity’ is required in order to generate a substantive theory from data, and more recently Swedberg (2012: p. 8) notes that ‘for successful theorizing in social science, you need to be thoroughly grounded in the core ideas of social science.’

**Fig. 1** The relationship between philosophical, theoretical and methodological elements in research. The logical progression from theory to data analysis is not wholly unidirectional, as theory may be generated from data through processes of induction or abduction



1988). As we have noted, these constructs from the original studies will represent certain theoretical frames of reference, either explicit or implicit, and these may be quite diverse.

The synthesist faces the task of accommodating, or at least taking account of, the theoretical frameworks of individual primary studies, and this is challenging given that, in terms of their underlying paradigms, these frameworks may make different fundamental assumptions at the level of ontology and epistemology, even when applied to ostensibly much the same phenomenon. For example, observational studies have seen doctor-patient encounters from the perspective of ethnomethodology (Heath 1981; Peräkylä 1998), or as a process of negotiation within the interactionist tradition (Strong 1979; Madden and Sim 2016), or as a forum in which more macrosociological notions of capitalist ideology and class relationships are reproduced (Waitzkin 1979). The insights derived within such studies will reflect, and be expressed in terms of, the theory within which they are set, the philosophical assumptions that underlie these theories, and the methodologies grounded in such theories (Fig. 1).

One strategy that can be adopted at the level of synthesis is simply to consider each primary study, one by one, in the light of its underlying theoretical context, but then put these theoretical considerations largely aside when moving into the process of synthesis, dealing with these second-order constructs at a largely descriptive level—as if they were summaries of the data in the original studies rather than conceptual accounts that give them some theoretical meaning. For example, the theme of ‘stigma’ might be drawn from a previous study of mental illness (Marcussen et al. 2019) without taking full account of the theory of identity (Burke and Stets 2009) in which this study was set, or the concepts of ‘rule’ and ‘ritual’ might be drawn from Strong’s (1979) study of paediatric clinics without reference to the theory of frame analysis (Goffman 1975) that underlies it. Similarly, ‘coping’ might be identified in a study of lung cancer (Harrop et al. 2017) without full regard to the associated theory of sense of coherence (Antonovsky 1979). Whilst in this way the manifest meanings of insights from primary studies may be sorted or coalesced in terms of their variation and commonality, the theoretical context of these insights is largely left behind.

The end result will treat the findings of primary studies more at a descriptive than at a conceptual level and will not develop a theoretical understanding.

The extent to which this is a concern will depend upon the approach that is taken to metasynthesis. For example, metasummary has been described as ‘a quantitatively oriented aggregation of qualitative findings that are themselves topical or thematic summaries or surveys of data’ (Sandelowski and Barroso 2007: p. 151). These metasummaries are specifically contrasted with more interpretive forms of metasynthesis and represent ‘integrations that are approximately equal to the sum of the parts, or the sum of findings across reports in a target domain of research’ (Thorne et al. 2004: p. 1358). As the intention is to produce a descriptive—rather than a conceptual or theoretical—account of findings from primary studies, the synthesis may proceed without engaging fully, or perhaps even at all, with the theoretical frameworks of these studies or with the paradigmatic assumptions that underly them. An approach such as metasummary will make certain philosophical assumptions of its own—it is likely, for example, to adopt a realist rather than an idealist ontology—but it may be argued that it is not thereby committed to analysing or assimilating the philosophical frameworks of the primary studies included in the synthesis.

If we return to another aggregative method of synthesis—meta-aggregation—this can be seen as rejecting more explicitly the notion of an ontological or epistemological foundation by virtue of adopting the perspective of pragmatism (Hannes and Lockwood 2011). This approach contests the more established view that methods must be grounded firmly in a particular philosophical paradigm. Instead of arguing, in a more-or-less deductive line of reasoning, that a certain ontological position as to what constitutes reality will lead inevitably to a particular epistemological stance on how one can learn about this reality, which in turn will dictate certain methodological choices, as was outlined in Fig. 1, pragmatism adopts a less foundationalist approach. For pragmatism, what matters is not whether the methods that one uses have a coherent philosophical grounding, but whether they are conducive to practical conclusions (Morgan 2014): in particular, certain actions or interventions. In this way, the understanding that is sought is instrumental rather than theoretical, and any notion of reconceptualizing the original studies is specifically avoided (Lockwood et al. 2015).

Accordingly, reflecting this pragmatic concern with action within a meta-aggregative approach, Hannes and Lockwood (2011: p. 1638) argue that ‘[c]hoosing one explanation over another... is similar to stating that the chosen one is expected to be better than another in producing an anticipated or desired outcome’ and that ‘[u]nlike theoretical predictions, declamatory statements do not indicate a hypothetical explanation for the insights emerging from the synthesis as a whole.’ Similarly, they say of meta-aggregation that it ‘does not seek to re-interpret as some other methods of qualitative synthesis do’ (Hannes and Lockwood 2011: p. 1637).

The implication of pragmatism here is that dealing with underlying epistemological and theoretical issues is not a concern simply because the aim of meta-aggregation is not to produce an interpretive or theoretical explanation but to generate practical ‘lines of action.’ Reconciling any differences in the underlying philosophical or theoretical frameworks of primary studies is therefore not an issue for this type of synthesis.<sup>7</sup>

<sup>7</sup> In addition to Hannes and Lockwood’s (2011) proposal of pragmatism as the philosophical foundation of meta-aggregation, Lockwood and Pearson (2013) argue for a form of transcendental phenomenology as the basis of this form of aggregation, whilst associating a more hermeneutic form of phenomenology with meta-ethnography. Whilst the transcendental versus interpretive distinction makes sense here, the basis for the appeal to phenomenology is less clear in their account.

### 3.4 Engaging with theoretical context

If, however, the purpose of a metasynthesis is to develop an interpretive or theoretical account of a phenomenon, rather than a more descriptive representation of a body of qualitative research, the problem of theoretical context is less easily settled. One approach would be to point to Major and Savin-Baden's (2010) suggestion that the synthesist should select studies that lie within the same methodological tradition, which will secure a large degree of similarity in their underlying philosophical assumptions. For example, studies employing in-depth interviews and exploring or developing a phenomenological theory are likely, in both respects, to be grounded in an idealist, rather than realist, ontology and in an interpretive, rather than neo-positivist, epistemology. The similar philosophical underpinning of such studies is therefore likely to give rise to both theoretical and methodological compatibility at the level of synthesis.

An alternative approach is to suggest that differing methodological frameworks are not problematic but are in fact beneficial to the synthesis. Thus, pointing to the differing theoretical frameworks and research methods used by primary investigators, Finfgeld-Connett (2018: p. 56) claims that '[t]hese factors alone help to ensure a thorough and unbiased examination of a research topic', and argues elsewhere (2014: p. 348–9):

First... combining findings from different epistemological perspectives represents a form of triangulation and enhances validity... Second, qualitative findings, regardless of their epistemological origins, constitute evidence-based results that have the potential to add to qualitative systematic reviews. Ignoring selected findings solely due to their epistemological origins seems entirely contrary to the goal of knowledge development and theory generation, especially when the meaning and context of the original findings are preserved.

The appeal to triangulation is not, however, entirely germane, as theoretical triangulation (Denzin 2009) is more to do with *choosing* two or more theoretical frameworks that are appropriate to interpret a particular body of data, rather than a strategy that can be used to *reconcile* epistemological differences in such frameworks (Blaikie 1991; Sim and Sharp 1998). Finfgeld-Connett's second argument seems to suggest that the meanings from individual studies can be synthesized without regard to questions of epistemology; but this assumes, rather than demonstrates, that one can separate the meaning of findings from their underlying philosophical assumptions, which is the question at issue.

Others confront the challenge of epistemology more directly. For example, Jensen and Allen (1996: p. 558) argue that 'the differing views of reality underpinning [various qualitative] approaches lead to the generation of substantively different kinds of knowledge', and Estabrooks et al. (1994: p. 506) contend that bringing together studies that use different research approaches makes theory development difficult because of 'major differences in the epistemological foundations' that may exist between methods. The extent to which such differences are troublesome will depend on how dissimilar the underlying assumptions are. On this basis Schreiber et al. (1997) suggest, for example, that a grounded theory study may be brought together more readily with an ethnographic study than with one centred in phenomenology. Similarly, Zimmer (2006) uses the same comparison of phenomenology and grounded theory to suggest that differences in focus (narrow and descriptively detailed in the former case and broader and more conceptual in the latter case) may present

difficulties in combining studies.<sup>8</sup> Consequently, seeking some form of theoretical uniformity within the studies that are synthesized will lessen the difficulty of reconciling differing theoretical contexts.

### 3.5 Metasynthesis as developing concepts and constructing theory

Rather than seek to assimilate and reconcile within a synthesis the conceptual and theoretical context of the primary studies, some approaches to metasynthesis take a different approach. In framework synthesis—based on the method of framework analysis used in primary qualitative research (Ritchie and Spencer 1994)—the conceptual or theoretical framework for the synthesis is largely determined a priori (Carroll et al. 2011, 2013). Findings in the studies reviewed are mapped to themes derived from this pre-existing conceptual framework, with the possibility of some additional themes suggested more inductively by these studies. A prior theoretical framework is thereby applied to the process of synthesis rather than being derived from it.

Other approaches take a more fully inductive approach and seek to generate new concepts and theories. Such approaches have been characterized by Schreiber et al. (1997) as involving either *theory explication* or *theory building*. Theory explication, despite its name, is not directly related to theories, but has to do with a process of reconceptualization, whereby a particular concept within primary studies is refined or elaborated through a process of deconstruction and reconstruction. Finfgeld's (1999) study of the concept of courage provides an example. By analysing her own and others' previous studies, Finfgeld sought to deconstruct and reconstruct courage as a concept in the context of chronic illness. In the process of theory explication, we might appeal to 'metaconcepts': higher-level concepts that help us make sense of the nature and function of lower-level concepts (Sartori 2009b).

Theory building goes somewhat further than theory explication, as it seeks to create new theory in the way exemplified by grounded theory (Schreiber et al. 1997). Although not framed in terms of theory construction, the seminal method of meta-ethnography (Noblit and Hare 1988) started the movement in the direction of theory-building metasynthesis. Meta-ethnography follows the inductive principles of grounded theory in relation to the 'lines of argument' that are constructed towards the conclusion of the synthesis. Adopting the notion of translation described by Turner (1980), findings from primary studies are translated into each other in the form of metaphors that capture the conceptual and interpretive essence of these findings, rather than simply their manifest meaning. These metaphors 'achieve both abstraction and complexity, and create translations that preserve the relations between concepts' (Noblit and Hare 1988: p. 37). A synthesis of insights from these studies is therefore produced through these lines of argument and generates conceptual interpretations that are not reducible to those of an individual constituent study in the synthesis (Campbell et al. 2003). For example, Malpass et al. (2009) develop a novel interpretation of antidepressant use through lines of argument derived from a synthesis of

<sup>8</sup> In contrast, Florczak (2018: p. 223) sees no such problem in the meta-aggregative approach, which in her view 'allows for data from different paradigms of thought to be synthesized, which means that findings from phenomenological studies can be mixed with data from grounded theory or other research methods as long as the voice of the participant is heard.' Her own position, in contrast, is that '[l]oosening the findings from particular paradigmatic perspectives strips them of their context and renders the synthesis meaningless.'

sixteen original studies. Patients' experiences of antidepressants were analysed in terms of both a decision-making and a meaning-making process, leading correspondingly to the theoretical notions of a 'medication career' and a 'moral career.'

Noblit (2018) emphasizes that meta-ethnography is not about synthesizing themes or concepts, which he associates with a more aggregative analysis, but about synthesizing the broader interpretations, or 'storylines', in the primary studies. Also, as noted above, Noblit and Hare (1988) described their inductive method of synthesis as taking place more at the level of interpretation than of theory.<sup>9</sup> To this extent, meta-ethnography moves away from the emphasis on theory-building originally developed within grounded theory (Glaser and Strauss 1967) and firmly maintained within Glaser's (1992) perspective on the method. However, in their adaptation of the principles of meta-ethnography within what they describe as critical interpretive synthesis, Dixon-Woods et al. (2006: p. 2) describe the aim of their method as the 'generation of theory with strong explanatory power.'<sup>10</sup>

### 3.6 Grounded formal theory and metatheory

The methods of theory explication and theory building outlined in the previous section synthesize concepts and interpretations derived from previous studies, but they do not synthesize theories, in terms of how we have defined these earlier. Instead, these concepts are integrated within a new theory constructed within the synthesis, such that theory is the end-product, rather than the raw material, of the process. Two approaches go further in terms of synthesizing theories *per se*.

The first of these is Kearney's (1998, 2001a) account of a form of synthesis—grounded formal theory—whereby substantive grounded theories embodied in original studies are synthesized into a higher-level formal theory with a greater degree of abstraction and generality. This is achieved by applying the standard methods of grounded theory—such as theoretical sampling, category formation, constant comparison and theoretical saturation (Glaser and Strauss 1967)—to the theoretical insights in the original grounded theory studies. Kearney's (2001b) synthesis of studies of domestic violence illustrates some key aspects of this method. The 16 studies included in the synthesis had all adopted a theory-building approach and used constant comparative methods characteristic of grounded theory, and similar methods were used at the level of the synthesis, indicating how this approach 'applies like methods to like materials' (Kearney 2001b: p. 271). In articulating the synthesis, Kearney has recourse not only to the findings in the original studies but also to some of the data quoted. This notion of grounding insights in the data is in line with the principles of grounded theory, but it also suggests that the process of grounded formal theory relies not just on a synthesis of theoretical insights within the original studies but also on constructing theory *de novo* from data within these studies.<sup>11</sup> Hence, Kearney

<sup>9</sup> More explicit links with the notion of theory have, however, been made recently within grounded theory (Noblit 2018; Urrieta and Noblit 2018).

<sup>10</sup> Doyle (2003) describes an approach to meta-ethnography in which several 'external' theories are applied to the process of synthesis, suggesting a less inductive process than that originally described by Noblit and Hare (1988).

<sup>11</sup> Here, Kearney applies the idea of theoretical saturation: 'The fewer the complete substantive theories, the greater the need for re-interpretation of original data by the formal theorist and the lower the theoretical saturation of the findings. The greater the number of substantive theories to work with, the higher the level of formal theory that can be achieved and the more saturated and transferable will be to the product of analysis' (Kearney 2001a: p. 237).

(2001b: p. 279) describes her analysis as: ‘the consolidation of conceptual components from different studies and the bringing together of a broad spectrum of data in support of this analysis.’

The second approach to theory integration is based on the idea of metatheory. Ritzer (1990) describes three types of metatheorizing, each of which takes existing theory as its subject matter.<sup>12</sup> The first of these focuses on the study of theory in order to develop a fuller understanding of its nature and function. The second, which Ritzer (1990: p. 4) terms ‘metatheorizing as a prelude to theory development’, seeks to develop new theory; Anchin (2008: p. 804–805) captures this function as a ‘scaffolding for integrating more specific theories that conceptually and empirically map different aspects of the phenomenon under study.’ The third type has to do with establishing an overarching perspective that encompasses some or all of existing theory in an area.<sup>13</sup> Whilst a number of writers on metatheory (e.g. Wallace 1992) concern themselves principally with the first approach—which may be seen as a prerequisite for the other approaches (Weinstein and Weinstein 1992)—of particular relevance here are the second and third approaches. Paterson et al. (2001: p. 117) see metatheory as encompassing both of these functions:

Meta-theory creates the context in which the implications of a range of theoretical approaches that have influenced the body of knowledge can be considered and evaluated. In addition, new theoretical alternatives that might account for a more comprehensive, accurate or credible interpretation of the phenomenon can be synthesized.

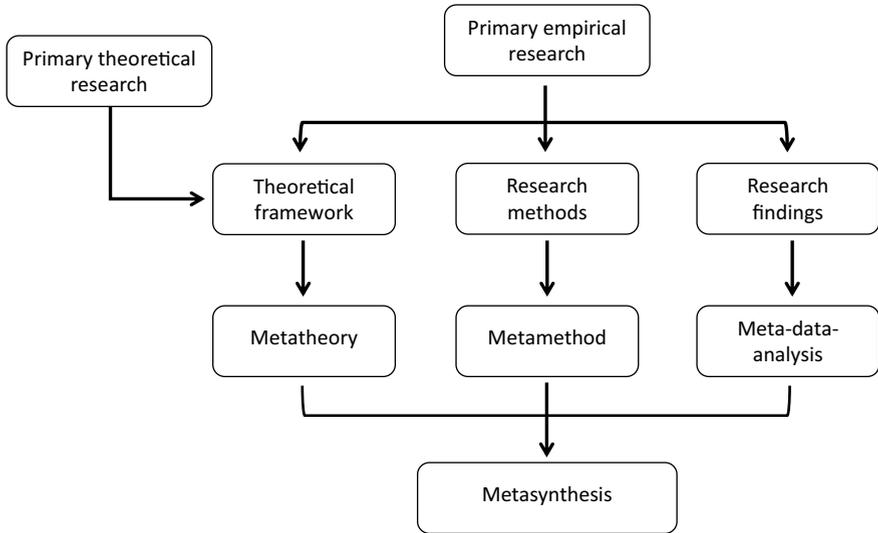
Within the field of qualitative synthesis, metatheory—alongside metamethod (the study, evaluation and codification of research methods) and meta-data-analysis (the analysis of findings from previous studies, essentially equivalent to the approaches that we have hitherto referred to under the broad heading of metasynthesis)—has been incorporated in what has been referred to as ‘metastudy’ (Zhao 1991). In their own account of metastudy, Paterson et al. (2001) use the term ‘metasynthesis’ in a specific sense to refer to the integration of the processes of metatheory, metamethod and meta-data-analysis; metasynthesis here is ‘the creation of a new interpretation of a phenomenon that accounts for the data, method, and theory by which the phenomenon has been studied by others’ (Paterson et al. 2001: p. 13); see Fig. 2. In this way, not just the findings of primary studies are analysed, but also their theoretical and methodological bases and assumptions.<sup>14</sup> Hence, metastudy can be regarded as a synthesis of studies, not just of findings (Thorne et al. 2004).

The ways in which metatheorizing and its place in the wider process of metastudy have been interpreted and represented in the literature are varied. For example, in their metastudy of childhood illness, Nicholas et al. (2006) focus on metamethod and meta-data-analysis, but do not explain how they addressed metatheory. Jefferies et al. (2010) describe their synthesis of research on nursing documentation as a metastudy but focus just on the findings of the included studies, without the other elements of metastudy described by Zhao (1991) and Paterson et al. (2001), thereby suggesting a

<sup>12</sup> The theories on which metatheory characteristically operates are what Merton (1968) called theories of the middle range. These are substantive theories that seek to explain specific, delimited aspects of social life, rather than more abstract, general theories that lie further from empirical reality.

<sup>13</sup> As an extension of Ritzer’s first formulation, Colomy (1991) identifies an addition function of metatheory: that of adjudicating between different theoretical traditions.

<sup>14</sup> In a similar way, critical interpretive synthesis (Dixon-Woods et al. 2006) extends beyond the findings of primary studies to a critical analysis of their theoretical and methodological contexts.



**Fig. 2** Elements within metastudy; adapted from Zhao (1991) and Paterson et al. (2001)

different interpretation of the term. Watkins et al. (2010) address all three elements of metastudy in their synthesis of research on mental health in Black men, but the emphasis in their metatheory on the grounded theory perspective in the studies reviewed suggests an interpretation of metatheory focused more on methodology than on substantive theory. Similarly, Smit et al. (2019) describe as metatheory an assessment of the confidence—in terms of relevance, coherence and adequacy—that can be placed in the findings of their review, with no real reference to the evaluation of theory in the studies they reviewed. In addition, many studies centre their metatheory on evaluating the theories used in the primary studies, rather than on synthesizing them (Howard et al. 2007; Edwards et al. 2009; Lee et al. 2015; Ronkainen et al. 2016; Holt et al. 2017; Thurlings and den Brok 2017; Kersey et al. 2022). Finally, in Honein-AbouHaidar et al.'s (2016) metastudy of studies of colorectal cancer screening, an explanatory framework is developed in the metasynthesis stage of the metastudy, but it is unclear to what extent this is derived from the process of metatheory as opposed to that of meta-data-analysis.

However, a recent study that moves closer to the synthesis of theories through a process of metatheorizing is Al-Sahan et al.'s (2020) study of psychosocial responses to loss of bodily parts. Through a search of the literature, the authors found 89 relevant 'primary' theories, and within these 586 constructs were identified through a process of deconstruction of the primary theories. These constructs were, in turn, organized into seven construct categories, which were organized into five pre-existing 'dominant' theories (communication, developmental regulation, emotion, resource, and social cognition) with which these construct categories were associated. A similar approach is taken in a synthesis of research on mental toughness by Anthony et al. (2016), who relate the findings in the studies reviewed to a prior bioecological model of human development (Bronfenbrenner and Morris 2006). However, the process of synthesis in these examples takes the form not so much of an integration of primary theories as a deconstruction of these theories and a subsequent mapping of theoretical constructs to a smaller number of broader, established theories.

A somewhat different approach is taken by Pound and Campbell (2015), based on a view of metatheorizing proposed by Turner (1990: p. 38) that emphasizes the generation of ‘theories that are more parsimonious, abstract and useful in explain how the social universe operates.’ In synthesizing a number of sociological theories on risk taking, they analyse each theory to identify its core theoretical propositions (e.g. propositions relating to Becker’s (1963) notion of the deviant career) and render these more abstract, with the result that they are less bound to a particular substantive or historical context. These propositions are then tabulated in terms of their similarities and dissimilarities, a process that they liken somewhat to reciprocal and refutational translation in meta-ethnography. Based on an analysis of such convergence or divergence, these propositions are integrated within a new, ‘more robust’ theory that brings additional theoretical insight, which by further analogy with meta-ethnography is likened to the construction of a line of argument (Pound and Campbell 2015). This approach brings us considerably closer to an integrated theory.

In summary, the theoretical context of primary qualitative studies can be handled within metasynthesis in various ways. In the first instance, it can be largely set aside, as within meta-aggregation. In more interpretive syntheses, a particular concept in the primary studies can be reinterpreted and reconceptualized: Schreiber et al.’s (1997) notion of theory explication. Moving closer to the level of theory, interpretations in primary studies can be brought together to form lines of argument (in meta-ethnography) or to build theory (critical interpretive synthesis). Finally, an attempt can be made to synthesize existing theories themselves through grounded formal theory or metatheorizing.

#### 4 Overall reflections

We have examined the ways in which, and the extent to which, the empirical and theoretical contexts of primary research can be preserved or accounted for in the process of metasynthesis. Regarding the first of these, we have argued that it is the insights derived from these data, not the data per se, that are the appropriate subject matter of a metasynthesis. Although primary data quoted in a study may inform an understanding of the way in which the authors of a study developed and named certain codes or themes in their analysis, this does not imply that data should themselves be the material on which the synthesist conducts his or her analysis.

It would be wrong, however, to see this loss of empirical context as an inadequacy. If metasynthesis—particularly in its interpretive rather than its aggregative variety—is about drawing broader conceptual or theoretical insights from primary studies, some loss of contact with this empirical context is inevitable, and even desirable, and to describe this as a limitation of metasynthesis (Nicholas et al. 2006) or as contrary to the interpretive paradigm (Zimmer 2006) may be misleading. In this connection, Richards (1998: p. 320) maintains that the ‘making and using of theory (in any area of inquiry) requires distance from the data... we should get (though not necessarily stay) close to our data.’ In a similar but more instrumental vein, Gewurtz et al. (2008: p. 302) suggest that within metasynthesis ‘some distance from the lived-experience might be a necessary sacrifice in order to develop deeper insights and understanding, and to make findings from qualitative research and phenomena more accessible and relevant to practice.’ Concerns about a loss of the empirical context of the primary studies may therefore be ill-founded insofar as they misunderstand the higher-level analysis that occurs within a metasynthesis. The ‘richness’ achieved through a metasynthesis lies not in a representation of first-person accounts of the

empirical world but in the insights that are derived from primary qualitative studies. It is debatable, therefore, to what extent an interpretive synthesis is realistically able ‘to remain attentive to the identities of individual participants and to respect their individual voices’ (Major and Savin-Baden 2011: p. 657). At the same time, however, in the search for these higher-order insights, the empirical world should not be made invisible; Kearney (2001a: p. 243) argues that the theory developed through a synthesis should not be ‘so abstract that its terms seem to float over the realities of illness experience.’

Of relevance here is the distinction between descriptive, interpretive, and theoretical validity (Maxwell 1992). Descriptive validity, as Maxwell describes it, refers to the simple accuracy of what researchers report from their data collection, separate from any inference of meaning. Interpretive validity relates to a more emic notion of participants’ meanings and perspectives as expressed in the accounts they give. These accounts are ‘grounded in the language of the people studied and rely as much as possible on their own words and concepts’ (Maxwell 1992: p. 289). In contrast, theoretical validity ‘goes beyond concrete description and interpretation and explicitly addresses the theoretical constructions that the researcher brings to, or develops during, the study’ (Maxwell 1992: p. 291). Each of these types of validity can be seen as a precondition for the next one. As Sandelowski (2006) indicates, in metasynthesis interpretive validity, and thereby theoretical validity, depend upon how the synthesist deals with the primary authors’ interpretations, not the first-person accounts of research participants, which are out of reach of the synthesist. Accordingly, descriptive validity is not within the control of the synthesist but lies in the hands of the primary researcher. So the empirical context of the original studies can and should be *reflected* in, but cannot be *reproduced* in, the synthesis.

Issues regarding the handling of concepts and theory in metasynthesis are perhaps more complex. Aggregative approaches to metasynthesis—such as metasummary (Sandelowski and Barroso 2007) and meta-aggregation (Pearson et al. 2011)—engage with primary studies largely at a descriptive rather than a conceptual level and often seek insights that are related to practical rather than theoretical concerns. Conceptual and theoretical issues are therefore not problematized within this approach and Strike and Posner’s (1983: p. 359) notion of ‘reconceptualizing the assumptions’ of the original research is largely absent. In more interpretive models of metasynthesis, insights are derived at a more conceptual level, and if some account is not taken of the philosophical or theoretical standpoints underlying the primary studies, a conceptually thin synthesis will result. Unless a pragmatist stance is adopted, a fuller engagement with theory does, however, bring the challenge of reconciling philosophical or theoretical frameworks that may be in some measure discrepant (Suri 2013). Clearly, to the extent that studies chosen for synthesis come from similar, or philosophically compatible, traditions, this difficulty will be lessened (Jensen and Allen 1996; Major and Savin-Baden 2010).

With regard to concepts described or developed within previous studies, the process of theory explication described by Schreiber et al. (1989) allows these concepts to be integrated and refined, as in Finfgeld’s (1999) analysis of courage described earlier. Moving from the level of concepts that of theory, several interpretive approaches within metasynthesis seek to build new theory—or in the case of meta-ethnography, to construct higher-order interpretations—from the original studies. These syntheses often follow the principles of grounded theory, which is not, nor indeed seeks to be, premised on assimilating or integrating previously articulated theory, and to that extent this is a coherent approach. Other syntheses do, however, engage directly with the substantive content of extant theories through the processes of grounded formal theory or metatheorizing. Grounded formal theory, by applying ‘like methods to like materials’ (Kearney

2001b: p. 271), avoids some of the difficulties associated with synthesizing studies that adopt divergent philosophical or theoretical standpoints, though this has the likely consequence that only a subset of the primary research on a particular phenomenon can be included in the synthesis. In this respect, metatheorizing is potentially broader in scope. However, the metatheory produced is often an analysis and evaluation of these theories, such that metatheorizing more commonly produces a critical juxtapositioning, rather than an integration, of these theories. This juxtapositioning—essentially the third of Ritzer’s (1990) functions of metatheory—allows a range of different theories to be mapped and analysed, and the heterogeneity, or even incompatibility, of these theories might be the focus of such analysis. Indeed, Something similar to this forms part of the meta-narrative synthesis described by Greenhalgh et al. (2005), where the focus is on examining and comparing the different, and often incommensurable, traditions or perspectives that underlie empirical work in an area.

However, the form of metatheory that seeks some form of integration of theories poses a greater challenge:

If we gather and combine the insights of multiple theories, can we be sure that they share the same understanding of the world and how our concepts relate to it (the ontological question) and/or our ability to gather and accumulate knowledge of it (the epistemological question)? (Cairney 2013: p. 2)

This reflects Byrnes’ (1992) argument that the extent to which theories can coherently be combined depends on the degree to which they share what he calls metatheoretical belief systems. These systems represent three core assumptions underlying a theory, which relate broadly to: i) the phenomena that it is appropriate to examine, ii) issues of ontology, and iii) issues of epistemology. Combining theories therefore requires compatibility at the level of their fundamental philosophical assumptions. For some, this would set very strict limits on theory integration across different paradigms (Burrell and Morgan 1979; Jackson and Carter 1991). In contrast, Sibeon (2004) argues for ‘ontological flexibility’ in his defence of theory synthesis and opposes a strong notion of incommensurability, even in respect of ‘mutually opposed schools of thought’ (p. 29). He argues that:

synthesis and theoretical integration... is perfectly legitimate providing that the integration, where it combines otherwise unaligned or mutually exclusive concepts, does not contradict itself through failure to re-work the cluster of imported conceptualizations so as to make them compatible (p. 30).

This quotation does, however, indicate that some degree of theoretical compatibility is necessary. Hence, Pound and Campbell (2015) focused specifically on sociological theories of risk-taking, and warn, notwithstanding Sibeon’s view, that their approach to metatheorizing might meet problems of incommensurability if conducted across disciplines. They further note a difficulty in synthesizing all of the theories that they identified by virtue of their differing breadth—specifically, Durkheim’s (1897) work on suicide was found difficult to integrate with other more focused theories.

A further challenge lies in assimilating the philosophical framework represented in individual studies within the framework within which the synthesis itself is set. Therefore, for interpretive metasyntheses at least, as well as being compatible with each other, the studies chosen for review also have to be compatible with the philosophical and theoretical stance of the synthesist.

## 5 Conclusion

We have argued that metasynthesis should not be seen as some form of secondary data analysis. It is not the function of metasynthesis to reproduce the rich detail of the empirical world sought in primary studies, but to analyse the broader interpretations into which this detail is transformed. Data from original studies may be used illustratively, but not as the material on which the synthesis operates, given the selective and incomplete nature of these data. Loss of contact with the empirical context in which the primary data collection occurred is therefore not a shortcoming of metasynthesis, but a reflection of the higher-order interpretation that the synthesis involves.

Regarding more conceptual and theoretical concerns, aggregative methods of metasynthesis circumvent problematic issues by positioning themselves at a largely descriptive level of analysis and avoiding any process of reconceptualization. However, accommodating the conceptual frameworks utilized in primary studies is more challenging for interpretive metasynthesis—though if underlying philosophical assumptions, and theories based upon them, are broadly compatible, this difficulty is lessened.

The account of metastudy given by Paterson et al. (2001) provides a means of bringing together not only the theoretical context but also methodological characteristics with the findings of primary studies. The process of metatheorizing within this approach can provide a form of critical juxtapositioning of different theoretical frameworks, and of methodological approaches, and thereby illuminate the interpretations developed within the synthesis. To date, however, a comprehensive account is lacking of the extent to which theories can be integrated within a metasynthesis and the way in which this might be done, though a degree of similarity in the scope and philosophical underpinnings of these theories appears to be crucial.

In terms of research practice, those engaging in metasynthesis should acknowledge that seeking to preserve in a full sense the empirical context of the original qualitative studies is neither possible nor necessary. Additionally, unless perhaps a purely aggregative synthesis is proposed, due regard should be given to differences, and possible incompatibilities, in the theoretical and philosophical frameworks that may underlie the studies included in the metasynthesis, and the synthesis should be constructed in the light of these. The way in which not just theoretical concepts but theories themselves might be synthesized is a potentially fruitful area for further methodological development.

**Acknowledgements** The authors thank Jackie Waterfield for helpful comments on a draft of this paper.

**Funding** The authors declare that no funds, grants or other support were received for the preparation of this manuscript.

**Data availability** Not applicable.

## Declarations

**Conflict of interest** The authors have no relevant financial or non-financial interests to disclose.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material

is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Al-Sahan, M.M., MacEntee, M.I., Thorne, S., Bryant, S.R.: A qualitative synthesis of theories on psychosocial response to loss of breasts, limbs or teeth. *J. Dent.* **103**, 100014 (2020)
- Anchin, J.C.: The critical role of the dialectic in viable metatheory: a commentary on Henriques' tree of knowledge system for integrating human knowledge. *Theory Psychol.* **18**(6), 801–816 (2008)
- Anthony, D.R., Gucciardi, D.F., Gordon, S.: A meta-study of qualitative research on mental toughness development. *Int. Rev. Sport Exerc. Psychol.* **9**(1), 160–190 (2016)
- Antonovsky, A.: *Health, Stress, and Coping*. Jossey-Bass, San Francisco, CA (1979)
- Atkins, S., Lewin, S., Smith, H., Engel, M., Fretheim, A., Volmink, J.: Conducting a meta-ethnography of qualitative literature: lessons learnt. *BMC Med. Res. Methodol.* **8**, 21 (2008)
- Barnett-Page, E., Thomas, J.: Methods for the synthesis of qualitative research: a critical review. *BMC Med. Res. Methodol.* **9**, 59 (2009)
- Becker, H.S.: *Outsiders: Studies in the Sociology of Deviance*. Free Press, New York (1963)
- Bergdahl, E.: Is meta-synthesis turning rich descriptions into thin reductions? A criticism of meta-aggregation as a form of qualitative synthesis. *Nurs. Inq.* **26**(1), e12273 (2019)
- Blaikie, N.: A critique of the use of triangulation in social research. *Qual. Quant.* **25**(2), 115–136 (1991)
- Blaikie, N., Priest, J.: *Social Research: Paradigms in Action*. Polity, Cambridge (2017)
- Blumer, H.: What is wrong with social theory? *Am. Sociol. Rev.* **19**(1), 3–10 (1954)
- Booth, A., Moore, G., Flemming, K., Garside, R., Rollins, N., Tunçalp, Ö., Noyes, J.: Taking account of context in systematic reviews and guidelines considering a complexity perspective. *BMJ Glob. Health* **4**, e000840 (2019)
- Booth, A., Noyes, J., Flemming, K., Gerhardus, A., Wahlster, P., Van Der Wilt, G.J., Mozygemba, K., Refolo, P., Sacchini, D., Tummers, M., Rehfuess, E.: Guidance on Choosing Qualitative Evidence Synthesis Methods for Use in Health Technology Assessments of Complex Interventions. Available from: <http://esquiresheffield.pbworks.com/w/file/fetch/111070576/Guidance-on-choosing-qualitative-evidence-synthesis-methods-for-use-in-HTA-of-complex-interventi.pdf> (2016)
- Braun, V., Clarke, V.: *Thematic Analysis: A Practical Guide*. Sage, London (2022)
- Britten, N., Garside, R., Pope, C., Frost, J., Cooper, C.: Asking more of qualitative synthesis: a response to Sally Thorne. *Qual. Health Res.* **27**(9), 1370–1376 (2017)
- Bronfenbrenner, U., Morris, P.A.: The bioecological model of human development. In: Lerner, R.M. (ed.) *Handbook of Child Development: Theoretical Models of Human Development*, vol. 1, 6th edn., pp. 793–828. Wiley, Hoboken, NJ (2006)
- Bulmer, M.: Facts, concepts, theories and problems. In: Bulmer, M. (ed) *Sociological Research Methods: an Introduction*, 2nd edn, pp. 37–50. Macmillan, London (1984)
- Burke, P.J., Stets, J.E.: *Identity Theory*. Oxford University Press, New York (2009)
- Burr, V.: *Social Constructionism*, 3rd edn. Routledge, London (2015)
- Burrell, G., Morgan, G.: *Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life*. Heinemann, London (1979)
- Byrnes, J.P.: Categorizing and combining theories of cognitive development and learning. *Educ. Psychol. Rev.* **4**(3), 309–343 (1992)
- Cairney, P.: Standing on the shoulders of giants: How do we combine the insights of multiple theories in public policy studies? *Policy Stud. J.* **41**(1), 1–21 (2013)
- Campbell, R., Pound, P., Pope, C., Britten, N., Pill, R., Morgan, M., Donovan, J.: Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Soc. Sci. Med.* **56**(4), 671–684 (2003)
- Carroll, C., Booth, A., Cooper, K.: A worked example of “best fit” framework synthesis: a systematic review of views concerning the taking of some potential chemopreventive agents. *BMC Med. Res. Methodol.* **11**, 29 (2011)
- Carroll, C., Booth, A., Leaviss, J., Rick, J.: “Best fit” framework synthesis: refining the method. *BMC Med. Res. Methodol.* **13**, 37 (2013)
- Colomy, P.: Metatheorizing in a postpositivist frame. *Sociol. Perspect.* **34**(3), 269–286 (1991)

- Denzin, N.K.: *The Research Act: a Theoretical Introduction to Sociological Methods*. Aldine Transaction, New Brunswick (2009)
- Dixon-Woods, M., Agarwal, S., Jones, D., Young, B., Sutton, A.: Synthesising qualitative and quantitative evidence: a review of possible methods. *J. Health Serv. Res. Policy* **10**(1), 45–53 (2005)
- Dixon-Woods, M., Cavers, D., Agarwal, S., Annandale, E., Arthur, A., Harvey, J., Hsu, R., Katbamna, S., Olsen, R., Smith, L., Riley, R., Sutton, A.J.: Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Med. Res. Methodol.* **6**, 35 (2006)
- Doyle, L.H.: Synthesis through meta-ethnography: paradoxes, enhancements, and possibilities. *Qual. Res.* **3**(3), 321–344 (2003)
- Durkheim, E.: *Le Suicide: Étude de Sociologie*. Félix Alcan, Paris (1897)
- Edwards, M., Davies, M., Edwards, A.: What are the external influences on information exchange and shared decision-making in healthcare consultations: a meta-synthesis of the literature. *Patient Educ. Couns.* **75**(1), 37–52 (2009)
- Estabrooks, C.A., Field, P.A., Morse, J.M.: Aggregating qualitative findings: an approach to theory development. *Qual. Health Res.* **4**(4), 503–511 (1994)
- Fegran, L., Hall, E.O.C., Uhrenfeldt, L., Aagaard, H., Ludvigsen, M.S.: Adolescents' and young adults' transition experiences when transferring from paediatric to adult care: a qualitative metasynthesis. *Int. J. Nurs. Stud.* **51**(1), 123–135 (2014)
- Finfgeld, D.L.: Courage as a process of pushing beyond the struggle. *Qual. Health Res.* **9**(6), 803–814 (1999)
- Finfgeld, D.L.: Metasynthesis: the state of the art – so far. *Qual. Health Res.* **13**(7), 893–904 (2003)
- Finfgeld-Connett, D.: Generalizability and transferability of meta-synthesis research findings. *J. Adv. Nurs.* **66**(2), 246–254 (2010)
- Finfgeld-Connett, D.: Use of content analysis to conduct knowledge-building and theory-generating qualitative systematic reviews. *Qual. Res.* **14**(3), 341–252 (2014)
- Finfgeld-Connett, D.: *A Guide to Qualitative Meta-Synthesis*. Routledge, New York, NY (2018)
- Florczak, K.: Qualitative synthesis: ontological care please. *Nurs. Sci. q.* **31**(3), 220–223 (2018)
- Geertz, C.: Thick description: toward an interpretive theory of culture. In: *The Interpretation of Cultures: selected essays*, pp. 3–30. Basic Books, New York (1973)
- Gewurtz, R., Stergiou-Kita, M., Shaw, L., Kirsh, B., Rappolt, S.: Qualitative meta-synthesis: reflections on the utility and challenges in occupational therapy. *Can. J. Occup. Ther.* **75**(5), 301–308 (2008)
- Glaser, B.G.: *Theoretical Sensitivity*. Sociology Press, Mill Valley (1978)
- Glaser, B.G.: *Basics of Grounded Theory Analysis: Emergence vs Forcing*. Sociology Press, Mill Valley (1992)
- Glaser, B.G., Strauss, A.L.: *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine, Chicago, IL (1967)
- Goertz, G.: *Social Science Concepts: a User's Guide*. Princeton University Press, Princeton (2006)
- Goffman, E.: *Frame Analysis: an Essay on the Organization of Experience*. Penguin, Harmondsworth (1975)
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., Kyriakidou, O., Peacock, R.: Storylines of research in diffusion of innovation: a meta-narrative approach to systematic review. *Soc. Sci. Med.* **61**(2), 417–430 (2005)
- Hannes, K., Lockwood, C.: Pragmatism as the philosophical foundation for the Joanna Briggs meta-aggregative approach to qualitative evidence synthesis. *J. Adv. Nurs.* **67**(7), 1632–1642 (2011)
- Harrop, E., Noble, S., Edwards, M., Sivell, S., Moore, B., Nelson, A.: Managing, making sense of and finding meaning in advanced illness: a qualitative exploration of the coping and wellbeing experiences of patients with lung cancer. *Sociol. Health Illn.* **39**(8), 1448–1464 (2017)
- Heath, C.: The opening sequence in doctor-patient interaction. In: Atkinson, P., Heath, C. (eds.) *Medical Work: Realities and Routines*, pp. 71–90. Gower, Farnborough (1981)
- Heaton, J.: Secondary analysis of qualitative data: an overview. *Hist. Soc. Res.* **33**(3), 33–45 (2008)
- Holt, N.L., Neely, K.C., Slater, L.G., Camiré, M., Côté, J., Fraser-Thomas, J., MacDonald, D., Strachan, L., Tamminen, K.A.: A grounded theory of positive youth development through sport based on results from a qualitative meta-study. *Int. Rev. Sport Exerc. Psychol.* **10**(1), 1–49 (2017)
- Honein-AbouHaidar, G.N., Kastner, M., Vuong, V., Perrier, L., Daly, C., Rabeneck, L., Straus, S., Baxter, N.N.: Systematic review and meta-study synthesis of qualitative studies evaluating facilitators and barriers to participants in colorectal cancer screening. *Cancer Epidemiol. Biomarkers Prev.* **25**(6), 907–917 (2016)
- Howard, A.F., Balneaves, L.G., Bottorff, J.L.: Ethnocultural women's experiences of breast cancer: a qualitative meta-study. *Cancer Nurs.* **30**(4), E27–E35 (2007)
- Hoyle, R.H., Harris, M.J., Judd, C.M.: *Research Methods in Social Relations*, 7th edn. Wadsworth, Belmont (2002)

- Jackson, N., Carter, P.: In defence of paradigm incommensurability. *Organ. Stud.* **12**(1), 109–127 (1991)
- Jefferies, D., Johnson, M., Griffiths, R.: (2010) A meta-study of the essentials of quality nursing documentation. *Int. J. Nurs. Pract.* **16**(2), 112–124 (2010)
- Jensen, L.A., Allen, M.N.: Meta-synthesis of qualitative findings. *Qual. Health Res.* **6**(4), 553–560 (1996)
- Kearney, M.H.: Ready-to-wear: discovering grounded formal theory. *Res. Nurs. Health* **21**(2), 179–186 (1998)
- Kearney, M.H.: New directions in grounded formal theory. In: Schreiber, R.S., Stern, P.M. (eds.) *Using Grounded Theory in Nursing*, pp. 227–246. Springer, New York (2001a)
- Kearney, M.H.: Enduring love: a grounded formal theory of women's experience of domestic violence. *Res. Nurs. Health* **24**(4), 270–282 (2001b)
- Kerlinger, F.N.: *Foundations of Behavioral Research*, 3<sup>rd</sup> edn. Harcourt Brace Jovanovich, Fort Worth, TX (1986)
- Kersey, K., Lyons, A.C., Hutton, F.: Alcohol and drinking within the lives of midlife women: a meta-study. *Int. J. Drug Policy* **99**, 103453 (2022)
- Kuhn, T.S.: *The Structure of Scientific Revolutions*, 2nd edn. Chicago University Press, Chicago (1970)
- Lee, H., Tamminen, K.A., Clark, A.M., Slater, L., Spence, J.C., Holt, N.L.: A meta-study of qualitative research examining determinants of children's independent active free play. *Int. J. Behav. Nutr. Phys. Act.* **12**, 5 (2015)
- Lindahl, B., Lindblad, B.-M.: Family members' experiences of everyday life when a child is dependent on a ventilator: a metasynthesis study. *J. Fam. Nurs.* **17**(2), 241–269 (2011)
- Lockwood, C., Munn, Z., Porritt, K.: Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. *Int. J. Evid. Based Healthc.* **13**(3), 179–187 (2015)
- Lockwood, C., Pearson, A.: *Comparison of Meta-Aggregation and Meta-Ethnography as Qualitative Review Methods*. Wolters Kluwer, Philadelphia, PA (2013)
- Lockwood, C., Porritt, K., Munn, Z., Rittenmeyer, L., Salmond, S., Bjerrum, M., Loveday, H., Carrier, J., Stannard, D.: *Systematic reviews of qualitative evidence*. In: Aromataris, E., Munn, Z. (eds.) *JBI Manual for Evidence Synthesis*. Joanna Briggs Institute, Adelaide (2020)
- Madden, S., Sim, J.: Acquiring a diagnosis of fibromyalgia syndrome: the sociology of diagnosis. *Soc. Theory Health* **14**(1), 88–108 (2016)
- Maio, G.R., Haddock, G.: *The Psychology of Attitudes and Attitude Change*. Sage, London (2010)
- Major, C.H., Savin-Baden, M.: *An Introduction to Qualitative Research Synthesis: Managing the Information Explosion in Social Science Research*. Routledge, London (2010)
- Major, C.H., Savin-Baden, M.: Integration of qualitative evidence: towards construction of academic knowledge in social science and professional fields. *Qual. Res.* **11**(6), 645–663 (2011)
- Malpass, A., Shaw, A., Sharp, D., Walter, F., Feder, G., Ridd, M., Kessler, D.: "Medication career" or "moral career"? The two sides of managing antidepressants: a meta-ethnography of patients' experience of antidepressants. *Soc. Sci. Med.* **68**(1), 154–168 (2009)
- Malterud, K.: *Qualitative Metasynthesis: a Research Method for Medicine and Health Sciences*. Routledge, London (2019)
- Marcussen, K., Gallagher, M., Ritter, C.: Mental illness as stigmatized identity. *Soc. Ment. Health* **9**(2), 211–227 (2019)
- Maxwell, J.A.: Understanding and validity in qualitative research. *Harv. Educ. Rev.* **62**(3), 279–300 (1992)
- Maxwell, J.A.: *Qualitative Research Design: an Interactive Approach*, 3rd edn. Sage Publications, Thousand Oaks, CA (2013)
- Merton, R.K.: On sociological theories of the middle range. In: Merton, R.K. (ed.) *Social Theory and Social Structure*, enlarged edn., pp. 39–72. The Free Press, New York, NY (1968)
- Mishler, E.G.: Meaning in context: is there any other kind? *Harv. Educ. Rev.* **49**(1), 1–19 (1979)
- Morgan, D.L.: Pragmatism as a paradigm for social research. *Qual. Inq.* **20**(8), 1045–1053 (2014)
- Nicholas, D.B., Globerman, J., Antle, B.J., McNeill, T., Lach, L.M.: Processes of metastudy: a study of psychosocial adaptation to childhood chronic health conditions. *Int. J. Qual. Methods* **5**(1), 1–10 (2006)
- Noblit, G., Hare, R.D.: *Meta-ethnography: Synthesizing Qualitative Studies*. Sage, Newbury Park, CA (1988)
- Noblit, G.W.: Meta-ethnography: adaptation and return. In: Urrieta, L., Noblit, G.W. (eds.) *Cultural Constructions of Identity: Meta-Ethnography and Theory*, pp. 34–50. Oxford University Press, Oxford (2018)
- Nunnally, J.C., Bernstein, I.H.: *Psychometric Theory*, 3rd edn. McGraw Hill, New York, NY (1994)
- Oliver, S., Rees, R., Clarke-Jones, L., Milne, R., Oakley, A., Gabbay, J., Stein, K., Buchanan, P., Gyte, G.: A multidimensional conceptual framework for analysing public involvement in health services research. *Health Expect.* **11**(1), 72–84 (2008)

- Paley, J.: *Phenomenology as Qualitative Research: a Critical Analysis of Meaning Attribution*. Routledge, London (2017)
- Paterson, B.L.: "It looks great but how do I know it fits?": an introduction to meta-synthesis research. In: Hannes, K., Lockwood, C. (eds.) *Synthesizing Qualitative Research: Choosing the Right Approach*, pp. 1–20. Wiley, Chichester (2012)
- Paterson, B.L., Thorne, S.E., Canam, C., Jillings, C.: *Meta-study of Qualitative Health Research: a Practical Guide to Meta-analysis and Metasynthesis*. Sage, Thousand Oaks (2001)
- Pearson, A., Wiechula, R., Court, A., Lockwood, C.: The JBI model of evidence-based healthcare. *Int. J. Evid. Based Healthc.* **3**(8), 207–215 (2005)
- Pearson, A., Robertson-Malt, S., Rittenmeyer, L.: *Synthesizing Qualitative Evidence*. Lippincott – Joanna Briggs Institute, Philadelphia, PA (2011)
- Peräkylä, A.: Authority and accountability: the delivery of diagnosis in primary health care. *Soc. Psychol. q.* **61**(4), 301–320 (1998)
- Pilkington, K., Ridge, D.T., Igwesi-Chidobe, C.N., Chew-Graham, C.A., Little, P., Babatunde, O., Corp, N., McDermott, C., Cheshire, A.: A relational analysis of an invisible illness: a meta-ethnography of people with chronic fatigue syndrome/myalgic encephalomyelitis (CFS/ME) and their support needs. *Soc. Sci. Med.* **265**, 113369 (2020)
- Pound, P., Campbell, R.: Exploring the feasibility of theory synthesis: a worked example in the field of health related risk taking. *Soc. Sci. Med.* **124**, 57–65 (2015)
- Richards, L.: Closeness to data: the changing goals of qualitative data handling. *Qual. Health Res.* **8**(3), 319–328 (1998)
- Ritchie, J., Spencer, L.: Qualitative data analysis for applied policy research. In: Bryman, A., Burgess, R.G. (eds.) *Analyzing Qualitative Data*, pp. 173–194. Routledge, London (1994)
- Ritzer, G.: Metatheorizing in sociology. *Sociol. Forum* **5**(1), 3–15 (1990)
- Ronkainen, N.J., Kavoura, A., Ryba, T.V.: A meta-study of athletic identity research in sport psychology: current status and future directions. *Int. Rev. Sport Exerc. Psychol.* **9**(1), 45–64 (2016)
- Ryle, G.: The thinking of thoughts: what is 'le Penseur' doing? In: *Collected Papers 2: Collected Essays 1929–1968*, pp. 480–496. Hutchinson, London (1971)
- Saini, M., Shlonsky, A.: *Systematic Synthesis of Qualitative Research*. Oxford University Press, Oxford (2012)
- Salmon, W.C.: *Logic*. Prentice-Hall, Englewood Cliffs, NJ (1963)
- Sandelowski, M.: "Meta-Jeopardy": the crisis of representation in qualitative metasynthesis. *Nurs. Outlook* **54**(1), 10–16 (2006)
- Sandelowski, M., Barroso, J.: *Handbook for Synthesizing Qualitative Research*. Springer, New York (2007)
- Sartori, G.: Guidelines for concept analysis. In: Collier, D., Gerring, J. (eds.) *Concepts and Method in Social Science: The Tradition of Giovanni Sartori*, pp. 97–150. Routledge, New York (2009a)
- Sartori, G.: The Tower of Babel. In: Collier, D., Gerring, J. (eds.) *Concepts and Method in Social Science: The Tradition of Giovanni Sartori*, pp. 61–96. Routledge, New York (2009b)
- Schreiber, R., Crooks, D., Stern, P.N.: Qualitative meta-analysis. In: Morse, J.M. (ed.) *Completing a Qualitative Project: Details and Dialogue*, pp. 311–326. Sage, Thousand Oaks, CA (1997)
- Schutz, A.: Concept and theory formation in the social sciences. In: Natanson, M.A. (ed.) *Philosophy of the Social Sciences*, pp. 231–249. Random House, New York (1963)
- Seale, C.: *The Quality of Qualitative Research*. Sage, London (1999)
- Sibeon, R.: *Rethinking Social Theory*. Sage, London (2004)
- Sim, J., Sharp, K.: A critical appraisal of the role of triangulation in nursing research. *Int. J. Nurs. Stud.* **35**(1–2), 23–31 (1998)
- Smit, A., Coetzee, B.J., Roomaney, R., Bradshaw, M., Swartz, L.: Women's stories of living with breast cancer: a systematic review and meta-synthesis of qualitative evidence. *Soc. Sci. Med.* **222**, 231–245 (2019)
- Smith, L.K., Pope, C., Botha, J.L.: Patients' help-seeking experiences and delay in cancer presentation: a qualitative synthesis. *Lancet* **366**(9488), 825–831 (2005)
- Strike, K., Posner, G.: Types of synthesis and their criteria. In: Ward, S., Reed, L.J. (eds.) *Knowledge Structure and Use: Implications for Synthesis and Interpretation*, pp. 343–362. Temple University Press, Philadelphia (1983)
- Strong, P.M.: *The Ceremonial Order of the Clinic: Parents, Doctors and Medical Bureaucracies*. Routledge and Kegan Paul, London (1979)
- Suri, H.: Epistemological pluralism in research synthesis methods. *Int. J. Qual. Stud. Educ.* **26**(7), 889–611 (2013)

- Suri, H., Clarke, D.: Advancements in research synthesis methods: from a methodologically inclusive perspective. *Rev. Educ. Res.* **79**(1), 395–430 (2009)
- Swedberg, R.: Theorizing in sociology and social science: turning to the context of discovery. *Theory Soc.* **41**(1), 1–40 (2012)
- Swedberg, R.: Before theory comes theorizing or how to make social science more interesting. *Sociology* **67**(1), 5–22 (2016)
- Thomas, J., Harden, A.: Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Med. Res. Methodol.* **8**, 45 (2008)
- Thorne, S.: Metasynthetic madness: what kind of monster have we created? *Qual. Health Res.* **27**(1), 3–12 (2017)
- Thorne, S., Paterson, B., Acord, S., Canam, C., Joachim, G., Jillings, C.: Chronic illness experience: insights from a metastudy. *Qual. Health Res.* **12**(4), 437–452 (2002)
- Thorne, S., Jensen, L., Kearney, M.H., Noblit, G., Sandelowski, M.: Qualitative metasynthesis: reflections on methodological orientation and ideological agenda. *Qual. Health Res.* **14**(10), 1342–1365 (2004)
- Thurlings, M., den Brok, P.: Learning outcomes of teacher professional development activities: a meta-study. *Educ. Rev.* **69**(5), 554–576 (2017)
- Toye, F., Seers, K., Hannink, E., Barker, K.: A mega-ethnography of eleven qualitative evidence syntheses exploring the experience of living with chronic non-malignant pain. *BMC Med. Res. Methodol.* **17**, 116 (2017)
- Toye, F., Seers, K., Barker, K.L.: Living life precariously with rheumatoid arthritis – a mega-ethnography of nine qualitative evidence syntheses. *BMC Rheumatol.* **3**, 5 (2019)
- Turner, J.H.: Misuse and use of metatheory. *Sociol. Forum* **5**(1), 37–53 (1990)
- Turner, S.: Sociological Explanation as Translation. Cambridge University Press, New York, NY (1980)
- Uhrenfeldt, L., Aagaard, H., Hall, E.O.C., Fegran, L., Ludvigsen, M.S., Meyer, G.: A qualitative meta-synthesis of patients' experiences of intra- and inter-hospital transitions. *J. Adv. Nurs.* **69**(8), 1678–1690 (2013)
- Urrieta, L., Noblit, G.W.: Theorizing identity from qualitative synthesis: implications and conclusions. In: Urrieta, L., Noblit, G.W.: (eds) *Cultural Constructions of Identity: Meta-ethnography and Theory*, pp. 246–267. Oxford University Press, Oxford (2018)
- Waitzkin, H.: Medicine, superstructure and micropolitics. *Soc. Sci. Med.* **13A**(6), 601–609 (1979)
- Wallace, W.L.: Metatheory, conceptual standardization, and the future of sociology. In Ritzer, G.: (ed) *Metatheorizing*, pp. 53–68. Sage, Newbury Park (1992)
- Watkins, D.C., Walker, R.L., Griffith, D.M.: A meta-study of male mental health and well-being. *J. Black Psychol.* **36**(3), 303–330 (2010)
- Weed, M.: A potential method for the interpretive synthesis of qualitative research: issues in the development of 'meta-interpretation.' *Int. J. Soc. Res. Methodol.* **11**(1), 13–28 (2008)
- Weinstein, D., Weinstein, M.A.: The postmodern discourse of metatheory. In: Ritzer, G. (ed) *Metatheorizing*, pp. 135–150. Sage, Newbury Park (1992)
- Zhao, S.: Metatheory, meta-method, meta-data-analysis: what, why, and how? *Sociol. Perspect.* **34**(3), 377–390 (1991)
- Zimmer, L.: Qualitative meta-synthesis: a question of dialoguing with texts. *J. Adv. Nurs.* **53**(3), 311–318 (2006)