Sociology Compass

Intersectional approaches in health-risk research: a critical review

Katarina Giritli Nygren1 and Anna Olofsson2*

₁Forum for Gender Studies, Department of Social Sciences, Mid Sweden University ₂Risk and Crisis Research Centre, Department of Social Sciences, Mid Sweden University

Abstract

This article aims to explore how the intersectional approach is used in health-risk research. Intersectionality as a concept has been recognized in health-risk research since the early 2000s, but not as much as in the broader field of health-inequality studies. However, in the past five years, *Social Science and Medicine* has published a series of review articles that argue for the necessity of bringing intersectional perspectives to the field of health-risk studies more generally and quantitative health-risk research in particular. Asking what it means for health-risk researchers to practise intersectionality articulates the implications of translating a theoretical approach across fields and disciplines. When applying intersectional theory to health-risks, health and risk are often treated as fixed categories—something that becomes problematic within an intersectional framework. In order to overcome the dividing lines of health-risk research and intersectionality we argue for a new approach that echoes the 'doing gender' of gender studies: doing risk.

Key words: risk, health-risk, intersectionality, review, doing risk

Introduction

There is a growing sensitivity to risk in contemporary society. An increasing body of research on risk and its management and prevention is produced by a number of disciplines closely involved in risk research—engineering, psychology, cultural studies, sociology, and public health to mention a few—while much risk research is oriented towards particular kinds of risk, or the societal aspects of risk. Even though concerns have been raised that risk has become a tool with which to control society and individuals, a great deal of risk research still tends to adopt a naïve, practical, and applied approach rather than a critical perspective. This is true not least when it comes to issues related to social stratification and power relations in the shape of social class, gender, ethnicity, sexuality, and so on. However, the last decade has seen a change in the field, with new approaches either developed or integrated from other fields of research, so that on both a theoretical level (e.g. Rose 2005) and an

empirical level (Hannah-Moffat and O'Malley 2007) governmentality has been applied to risk research. Even more recently, risk researchers in the social sciences have called for the incorporation of an intersectional approach (Chávez-Rodríguez 2013; Olofsson 2011), particularly in applied health, public-health, and social-medicine research (Collins, von Unger, and Armbrister 2008; Hankivsky 2006; Kohn and Hudson 2002). An intersectional approach, with its focus on the interplay between power, structure, experience, and identity, can help us better understand the role of risk in society both on a more general and on an individual level. This is particularly interesting since the intersectional approach itself is evolving both within feminist theory (Lutz et al. 2011), and in a number of other fields (Cole 2009; Hindman 2011; Shaw, Chan, and McMahon 2012). Although there seems to be support for combining intersectionality with risk research, few scholars have so far embraced it in their work.

Reviewing the use of intersectionality in risk research is therefore apposite since it is not only a new trend, but also an interesting example of how different fields of research are combined and applied. This article will consider how intersectionality is used in health-risk research in particular, following by a description of methods and the source material. The main section of the review presents and analyses existing health-risk research, applying an intersectional perspective. The article ends with a discussion of the different positions and approaches to intersectionality, and the ways in which they can contribute to the development of both health-risk research.

Intersectionality

The term intersectionality was coined by the legal scholar Kimberlé Crenshaw and arose in the late 1980s and early 1990s from critical race studies, a movement born of a determination to problematize the law's purported colour-blindness, neutrality, and objectivity (Crenshaw 1989). From the first, intersectionality was strongly invested in the intersection of race and gender. In short, its focus was the inter-relation between different systems of social stratification. These systems create a 'matrix of domination' (Collins and Andersen, 2007)—in other words, every individual holds a position in different systems simultaneously (for example, as both oppressed and oppressor) whereby the exact location in the matrix of domination influences individual worldviews and lifechances. In this context combinations of subordinate categories are not 'additive', but 'multiple', and that the combination of group affiliations can mean very different things depending on time and place. Today the concept of intersectionality has travelled far from its original field, and is used in diverse ways in different contexts. Like the notion of subjectivity, constituted by mutually reinforcing vectors of race, gender, class, and sexuality, intersectionality has emerged as the primary theoretical tool designed to interrogate hierarchy, hegemony, and exclusivity. Leslie McCall stresses the importance of intersectionality, calling it 'the most important theoretical contribution that women's studies, in conjunction with related fields, have made so far' (McCall 2005, 1771). In terms of theory, it has contributed to a growing multidisciplinary approach to the analysis of subjects' experiences of both identity and oppression.

There are numerous feminist overviews of the concept that provide in Clifford Gertz' terms thick descriptions of its origins and the varied ways in which it has been understood and applied (McCall 2005; Prins 2006; Hancock 2007; Lutz et al. 2011). With so many ways of understanding intersectionality in circulation today, we think it is important to set out our standpoint. Our analysis of intersectional approaches within health-risk research has been inspired by Yeon Choo and Marx Ferree (2010), who have asked what it means for sociologists to practise intersectionality as a theoretical and methodological approach to inequality, and Leslie McCall (2005), whose review of the

methodology of intersectionality is often referred to in health-risk research. In their reading of different reviews of intersectionality (2010), Choo and Feree emphasize three dimensions of theorizing that have become part of what intersectionality signifies: the importance of including the perspectives of people experiencing multiple forms of marginality; an analytical shift stating the importance of a move beyond the enumeration and addition of race, class, gender, and other types of social subordination as separate factors into an analysis of their interactions; and a willingness to see multiple institutions as overlapping (cf. McCall 2005). Furthermore, it is important to include an analysis of unmarked categories and the ways in which power and privilege are constituted.

McCall (2005), who portrays intersectionality in a similar way, argues that intersectionality has introduced new challenges and methodological problems that limit the range of methodological approaches that can be used, because of the complexity that arises when the subject of analysis eludes simple categorizations and single-dimensional analysis. In McCall's view (2005), this also leads to restrictions on the kind of knowledge that can be produced, since researchers favour qualitative methodologies and avoid, or even reject, quantitative methodologies because of their often reductionist design. In her review, she focuses on how categories are managed and used to explore the full complexity of intersectionality in society. She describes three approaches to categories and complexity: anticategorical complexity, intracategorical complexity, and intercategorical complexity. The first two deconstruct analytical categories and question the use of quantifiable variables, since categories are seen as a reductionist way of understanding the complexity of intersecting power relations. Most of the intersectional research is found in either of the first two approaches, while there are relatively few studies that use an intercategorical approach to complexity. This third approach recognizes that there are relationships of inequality between social groups, and takes those relationships as the starting-point for an analysis (McCall 2001, 2005). The focus is thus on the relationships between categories, or social groups, not on the definition of the categories or groups as such.

Choo and Ferree (2010) also distinguish between three ways of understanding intersectionality: group-centred, process-centred, and system-centred. In their view most empirical, intersectional studies are group-centred studies, looking at multiply marginalized groups and their perspectives and theorizing the ways in which lived experiences of oppression cannot be separated into single issues of class, race, and gender. This way of understanding intersectionality is closely related to standpoint theory, which is sometimes associated with projects concerned with giving voice to marginalized and silenced groups, focusing especially on differences in experiences within a given category, and therefore comparable to what McCall (2005) calls intracategorical analysis. The second style, intersectionality studies as process-centred studies, refers to research that views intersectionality as a process and power as relational, looking particularly at the way interactions between variables multiply oppressions. This approach is sometimes used in comparative, multi-level analysis, and has also been associated with attempts to draw attention to so-called unmarked groups. Therefore, it is similar to what McCall frames as intercategorical analysis. The third form, intersectionality studies as system-centred studies, refers to research that holds intersectionality to be a complex system where gender and race are embedded in a framework of global capitalism—the organization of ownership, profit, and the commodification of labour—trying to find the local and historically particular regimes of inequality. This approach is also associated with comparative and historical perspectives. These three styles of understanding are not mutually exclusive, for two or all three can in theory be used in the same study. This is also the form of analysis where categories are most clearly questioned and alternative ways of analysis are developed, and which can be compared to McCall's anticategorical

approach (2005). In this article, we will draw on these earlier reviews and attempts to categorize and define what intersectionality is and how it is used in other fields. The three dimensions, identified above, signified by intersectionality as well as the three different ways of understanding intersectionality, will be used as reference points for our exploration of what it means for health-risk researchers to practise intersectionality as a theoretical and methodological approach to inequality.

Health-risk research

In many ways, health-risk research¹ can be described as a distinct field of its own. It is, at least in mainstream research, firmly wedded to the research culture of the medical sciences. This implies a set of methods, principles, and high-level procedures for using scientific data (for example, biological and epidemiological knowledge) in order to assess and compare the probable human health consequences of different exposures to risk. The goal is usually to identify and select actions or interventions that will result in the desired probability distributions of human health consequences in the affected population. Health-risk analysis is often divided into the overlapping stages of risk assessment, risk management, and risk communication. Power relations are not typically to the fore in more medically oriented health-risk research, and disparities in health resulting from social class, race or ethnic group, and gender have long been viewed as the elephant in the room of public-health practices and discourses (Smith 2007). However, in both social medicine and public health, power relations make their presence felt in concerns about the influence of poverty and violence on clients' health and response to treatment, for example, or regarding access to health care and the safety of treatments. Furthermore, public-health research has long shown how inequalities at a structural level can influence the health, often measured in life expectancy, of national populations in an international comparative perspective as well as different sections of populations within nations (for example, Marmot 2004).

Theories of gender, ethnicity, sexuality, and class are used in health-risk research, but, because of the tradition of using large quantitative data sets and the history of a close relation to medical, biological, and epidemiological research, in-depth analyses of social power structures are relatively rare. Against this, there have been calls for more intersectional approaches in the analysis of health-risks, citing the fact that many health-risk studies are quantitative in character, and that they, like much quantitative research (not to mention risk research), very rarely consider intersectional approaches where, for example, gender and race jointly differentiate between health statuses; most often they are treated as separated dimensions of social stratification. The recognition of diversity in health-risk research is exemplified in the growing literature on the more fluid nature of sex and gender, viewing gender as a social location and a determinant of health that is shaped by and in constant interaction with other determinants (Hankivsky and Christoffersen 2008). In the broader field of healthinequality studies, it is more often the case that researchers start from a position where the intersection of, for example, class, ethnicity, and gender is always relevant. Methodologically, this critical approach leads to research on the historical development of categories, discourse and narrative analyses, and ethnographic explorations (McCall 2005). It is also generally thought that qualitative methods lend themselves more readily to intersectional analysis, and in the field of health research it is evident that those who adopt an intersectional approach are rarely doing medically oriented health-risk analysis—it is as if there are two separate fields (for reviews, see, for example, Hankivsky 2011; Schultz and Mullings 2006).

Method and material

To enlarge on our knowledge of the field of risk research in the social sciences and the framework of intersectionality, a literature search was performed to identify the most relevant publications. The period considered ranged from 2000 to May 2013, the point at which we conducted the search. Using the searh engine PRIMO², general, full-text search using the term 'intersectionality' was used to put this review into perspective—that is, it was not limited to particular periodicals or disciplines. This search generated 4,906 hits;³ by adding 'risk', the number of hits was reduced to 2,176. The still very large number of publications is of course due to the fact that the word 'risk' is not only used in conjunction with harm, danger, or hazard, but is far more widespread. More nuanced searches, readings of abstracts and keywords, and searches of specific journals reduced the number of relevant publications to around 50. The specific journals in which these articles were published are: *Critical Public Health*; *Health*, *Risk & Society*; the *Journal of Risk Research*; *Social Science & Medicine*; *Risk Analysis*; and *Risk*, *Hazard & Crisis in Public Policy*. Of the 50 selected publications, 21 were published in *Social Science & Medicine*, six in *Critical Public Health*, and the remaining 23 in a variety of journals such as *Culture*, *Health & Sexuality*, the *Journal of Public Health* (two articles) and *Social Work*. One dissertation and one anthology were also identified and included in the analysis.

To decide whether a publication should be included in the review or not, all publications were skimmed through: in order to be included, they needed not only to mention the concepts of intersectionality or health risk, but actually to use them and their theoretical and/or empirical points of departure⁴. In the process, it turned out that some publications focused on neither intersectional approaches nor risk, but merely mentioned the concepts as examples for further research (Martin and Lippert 2011; Schwartz and Meyer 2010), while others led us to new relevant publications not found in the initial sweep. After a while, it became clear that even though there are likely to be more articles that focus on intersectionality and health risks, the identified corpus of some 50 publications was both broad and deep enough to provide a solid basis for the review (all of the reviewed articles are found either in the reference list marked with an asterisk, or in a separate list at the end of this article; the latter includes articles not referred to in the paper). The articles cover a wide range of subjects, HIV, disability, and mental health being the most frequent. Most are empirical analyses regarding a particular subject, such as HIV or other illnesses. There are some that discuss the possibility of applying an intersectional approach more generally in health research, while others develop models to measure intersectionality and particular health-risks empirically. There are also reviews of various kinds.

During the second stage of the process, the publications were read in detail. Variations such as the methods applied and the field of study were identified and further analysed. This resulted in analyses of the publications based on their different ways of integrating intersectionality with health-risk research. These approaches can be described as (i) attempts to integrate biomedical, epidemiological, and intersectional analysis, and (ii) attempts to develop and/or apply new methods. Our review is based on this detailed reading of the articles, and the next section is organized accordingly.

Review of the field: Intersectional approaches in health-risk research

Our literature review shows that intersectionality has been recognized in health-risk research since the early 2000s (for example, Kohn and Hudson 2002), but not as much as in the broader field of health-inequality studies. However, in the past five years, *Social Science and Medicine* has published

a series of review articles that argue for the necessity of bringing intersectional perspectives to the field of health-risk studies more generally and quantitative health-risk research in particular (see, for example, Iyer, Sen and Östlin 2008). Some point to the need of developing new methods (Veenstra 2011). Others make the case for an approach that goes beyond treating inequality as a demographic variable to focus more on structural inequalities than individual health, and particularly the importance of racism for understanding immigrant health. Drawing on the literature that examines racial disparities in birth outcomes, Rosenthal and Lobel (2011) argue that sexism and racism have interactive effects on the health and stress of black American women, increasing their risk of adverse birth outcomes. In another review, regarding the literature on the intersections between gender and class and their impact on health status, it is shown that the relative importance of risk factors for health outcomes often differs for men and women from different economic classes and contexts (Iyer, Sen and Östlin 2008). Such review articles invariably press home the point that intersectionality is necessary to the development of health-risk research. Interestingly, they also share a strong focus on finding new methods to capture inequalities rather than theorizing or conceptualizing intersectionality in the field of health-risk research; indeed, most articles, and not only the review articles, merely refer to some of the most leading publications without further description, analysis, or discussion.

In 2006, Gender, race, class and health: intersectional approaches, an anthology edited by Schultz and Mullings, was published. It pays far greater attention to theory, since its aim is to bring together both theory and empirical work to understand and reduce inequalities in health. The book makes the case that institutional contexts shape how inequalities are intersectional and contextual, how access to health care is differentiated by race, class, and gender, and how social action can reduce or eliminate health disparities. The anthology was well received by scholars from a variety of disciplines, as is evident in a number of reviews (Crossman 2007; Nack 2007; Smith 2007). Nack and Smith both welcome the volume and its stance on intersectionality, but Smith (2007) also makes a number of critical points to do with what the reviewer feels are peculiar absences: the extreme US-centric viewpoint, and the lack of attention paid to class as well as to biology in terms of problematizing the body and bodily experiences. Crossman (2007), on the other hand, dismisses the critique of the positivist paradigm in medical and health research found in the book. We will return to this later.

Looking at the corpus as a whole, and not only reviews, we find that much research focusing on health-risk inequalities still brings comparative group differences to the fore. These studies allow for descriptive examinations of (previously) neglected groups and help show how group differences emerge in the first place; however, they are not concerned with structural systems of oppression. In epidemiological research, risk categories such as race or sex are seldom linked to their corresponding structural force, in this instance racism and sexism (Ford and Airhihenbuwa 2010). It is more often the case that intersectionality is treated as a hypothesis: that ethnicity and gender are viewed as separate dimensions of a difference that might be related, and that evidence for this relationship should be sought in the outcomes related to various combinations. Unmarked categories, particularly whiteness, are invisible or go unexamined in the literature on health disparities, especially its strong association with privilege and social mobility (Viruell-Fuentes, Miranda, and Abdulrahim 2012).

However, there are a few examples of intersectional studies where researchers try to open up the black box of health risks (see Lykke 2011). In an ethnographic study, Hansen (2012) explores the structural, intersectional effects of ethnicity, social class, and the norms of masculine behaviour in relation to drug use. She talks about the discourse in international health studies that ascribes high rates of drug use, disease, and violence among low-income men of migrant background to a kind of

pathological masculinity. In that context, evangelist masculinity was used as a treatment strategy. As a way forward, she argues that addiction should be seen as an unfixed category, being both gendered and gendering (Hansen 2012). In a similar way, Collins, von Unger, and Armbrister (2008) try to problematize sexual risk in a study of how women's perceptions of mental illness affect their sexual relationships and the likelihood that they will engage in risky sexual behaviour. Their study takes a qualitative approach, interviewing girls at mental health clinics to see how mental health, risk of HIV/AIDS, race, and class intersect with different kinds of femininities—'locas', church stalwarts, and good girls—showing that sexual risk can occur even within monogamous relationships. Similarly, Dworkin (2006) argues that it is necessary to move beyond a singular sex/gender system in order to make visible the bisexual and lesbian transmission of risks of the HIV/AIDS epidemic, since HIV/AIDS risks have been so strongly associated with heterosexual or gay relations: 'the need for greater intersectionality in surveillance categories and the discourse that surrounds current modes of risk hierarchialization becomes even clearer when we look at current research trends' (Dworkin 2006, 619). The female-to-female transmission of HIV has become a blind spot, and a great many women might not think they are at risk because of the popular misconception that women-to-women sex is a no-risk practice. This, Dworkin argues, shows the importance of developing contextual understandings of both being 'vulnerable' and 'at risk'. Another good example is the way in which intersectionality comes into play in studies of black British Caribbean women's mental health (see, for example, Edge 2013; also Edge 2010; Edge and Rogers 2005). In the context of epidemiological studies which show strong correlations between deprivation, ethnicity, and mental health, and in which black British Caribbeans are overrepresented, most research is based on studies on men with serious mental illness and women are rendered invisible, relegated to discourses of being 'hard to reach' (Edge 2008). By taking the perspective of black British Caribbean women, Edge and Rogers (2005) highlight how culturally based conceptualizations of mental health and illness influence who people turn to for support, and when. For example, the women they studied drew strong boundaries between feeling depression and having depressive illness, and tended to fall back on the self-concept of being 'strong black women', meaning that they themselves would find strategies and cope without seeking formal help. Quite often, they applied spiritual imperatives to their social realities, which on the one hand gave them the strength to cope, but on the other also served as a barrier to seeking help, since depression could also be understood as a sign of spiritual weakness.

Attempts to integrate biomedical and intersectional analyses

Within the epidemiological paradigm, the multifactor model of disease causation predominates, often as what amounts to the routinized inclusion of race, socio-economics, and sex as individual measures; the processes and dynamics of disease risk and causation are systematically reduced to that level. What exactly it is about race, gender, and class that actually contributes to health and/or disease is not explored. There is most often a biomedical relevance ascribed to the categories without further theorization, and as such they become translated into direct biological disease risks and/or lifestyles and behaviours attributable to the individual 'at risk' level (Shim 2002). The assumptions and preferred research methods of the feminist intersectionality and biomedical paradigms sometimes sit in direct opposition to this. In biomedical research, individual subjects and diseases are the unit of analysis. Social differences are considered to be demographic variables rather than structural relations of power, and, as such, are isolated and homogenized as much as possible (Weber 2006; Kelly 2009).

There are also examples of longitudinal health-disparity research that have used an intersectionality approach. Warner and Brown (2011) focus on intergroup differences as an attempt to move beyond

the black/white dichotomy, arguing that race/ethnicity and gender intersect to affect the health of older adults, causing different exposures to risks that undermine health across the life course. There is also research that looks at how race/ethnicity and gender define the age trajectories of disability, but, when applying intersectionality to health care, it seems incongruous to ignore biological factors. Biology, biological difference, and the body not surprisingly constitute a controversial topic in any attempt to draw on feminist theory to inform health-care research and practice. Although traditional health-care researchers and practitioners generally take biology and biological difference for granted—indeed, women's health research tends to focus on socio-cultural processes and health to the exclusion of the body (Birke, 2000; Kuhlman and Babitsch, 2002)—many feminists have adopted a critical stance. As a feminist biologist, however, Birke (2000) describes herself as 'sitting on the fence'. On the one hand, she adopts a social constructionist stance, and critiques the categories used to describe what goes on in the body (for example, the gendering of hormones); on the other, hers is a realist stance when exploring how environmental conditions (for example, potentially toxic chemicals) affect what goes on in the body (cf. Flynn 2006). She argues that this allows her to avoid biological determinism without ignoring biology altogether. Similarly, Kuhlman and Babitsch (2002) advocate a reconceptualization of the body as flexible and open to transformation, but still material. Finally, Klinge and Bosch (2005) argue that the distinction between 'sex' as a matter of biological difference and 'gender' as a socially produced difference is necessary within the health-care field. For them it is a strategic decision, enabling them to convince health researchers that gender sensitivity is essential for good health care and research. Consistent with both Birke and Kuhlman and Babitsch, they advocate 'a non-essentialist interest into what is happening in bodies' (391). Bodies, whether whole or broken down into smaller dimensions, can be treated like the identity categories that until now have been the focus of research on intersectionality. This has the advantage of treating the body category in an equivalent manner to other categories, avoiding the privileging of biology associated with biological reductionism.

Most of the research using an intersectional approach within epidemiological studies is in relation to the HIV/AIDS epidemic. This might be explained by the way in which contemporary discourses on HIV vulnerability and risk categories have always been intertwined with gender, sexuality, and race, and therefore the need for theories of how these categories intersect has been of greater importance. For example, Dworkin (2005) builds an argument for an intersectional perspective in determining which 'surveillance categories' should be used in identifying who is vulnerable to HIV/AIDS. Thus, she draws almost exclusively on the discourse of social categories, with the occasional reference to identity (as in gender identity), which assumes that being identified with a particular social category implies the corresponding identity.

Attempts to develop and/or apply new methods

One of the core challenges for health-risk researchers is the methodological difference that exists between the intersectionality approach and traditional health-risk research. As already noted, the philosophical rationales behind these two approaches are worlds apart. In the corpus of publications studied here, we found at least three different ways used by researchers in order to handle this challenge. One of the commonest seems to be to refer in a relatively superficial way to 'intersectional methods' or 'intersectional approaches', and then carry on regardless, using the same data and methods as always (for example, Collins et al. 2011). Another way seems to be to adapt and develop traditional epidemiological and statistical methods so they sit better with an intersectionality approach (for example, Seng et al. 2012). The third way seems to be to criticize, or even to reject, quantitative categorizations, and instead argue for the adoptation of new, more

hermeneutic-based methodologies and designs in the field of health-risk research more generally (for example, Schultz and Mullings 2006).

Many of the authors using quantitative data and statistical analyses, and some using qualitative analyses as well, fail to problematize the challenge of combining these methods with concepts of intersectionality, and instead contend themselves with a reference to the work of, say, Leslie McCall (2001, 2005). In most cases, there is no discussion of categorization except for the notion of avoiding additive statistical analyses in favour of the multiplicative. One intriguing example is a study of environmental health inequalities where intersectionality for the first time appears under the heading of 'Analysis strategies' (Collins et al. 2011, 338). The authors then describe intersectional approaches in one sentence, followed by a short presentation of the intracategorical methodological approach and references to McCall (2005). They then perform a quantitative analysis of Hispanics and non-Hispanics, studying the effect of class and gender separately for each group 'intracategorically', concluding that Hispanics' ethnic status interacts with class, gender, and age status to increase risk. We do not suggest that there is anything wrong with this analysis per se, but the question remains whether this way of proceeding is true to the spirit of the intracategorical methodology for investigating the complexity of the intersections of gender, race, and class, or the ideas behind the intersectionality approach more generally. Similarly, a number of health-risk scholars perform intersectional analysis in a way that verges on the cursory, using intersectionality as the buzzword of the moment (Davis 2008) without actually caring much about the theoretical and methodological assumptions associated with the concept (Edge 2013).

However, it is more usual for scholars to address the challenge of combining the intersectionality approach with quantitative data, and to propose new or adapted ways to model intersectionality statistically. They recognize that quantitative approaches to intersectionality are lacking or are in development. One thing that several articles focus on is the use of interaction effects as a way of identifying multiplicative disadvantages (Hinze, Lin and Andersson 2012; Veenstra 2011; cf. McCall 2001; Warner and Brown 2011). As we have already mentioned, these studies often proceed from the same kinds of analysis that are common in quantitative studies, starting with bivariate analysis of, say, gender or ethnicity, and then adding multivariate analyses and interaction effects (Hinze, Lin, and Andersson 2012; Rosenfield 2012; Veenstra 2011). Hence, categories such as gender and ethnicity are still the point of departure for the analyses. Another challenge in quantitative studies is the available data. Frequently, existing surveys or similar data are used, and the questions and scales are not developed to measure the concepts associated with intersectional analyses (Hinze, Lin, and Andersson 2012; Rosenfield 2012; Veenstra 2011). The authors are therefore obliged to use these questions, even though their suitability is questionable (Seng et al. 2012). However, there are also several examples of how quantitative analyses, for example by using intercategorical analyses, brings new insights to the field of intersectionality. Sen and Iyer (2012) show how so-called 'middle groups' are often overlooked in intersectional and health-risk research, that non-poor women and poor men for example are similarly vulnerable to health-risks, and that gender and class intersections leverage one another in 'middle groups'. Seng et al. (2012) combine intersectionality with a socio-ecological framework to operationalize intersectionality on three levels: structural, contextual, and interpersonal.

Finally, there are studies that emphasize qualitative work as preferable to quantitative work. One example of this is Schultz and Mullings's anthology (2006), where most of the contributors, the editors included, pursue this line of argument. It is claimed that in health research, positivistic epistemology receives too much support, but despite that remains ineffective and, with respect to

intersectionality, inappropriate (Weber 2006). The reviews of the book devote a great deal of attention to methods and methodology, indicating that this delicate issue is key to health-risk research. The main point made by reviewers of the anthology is that it would be stronger if it addressed the importance of qualitative and quantitative researchers working together, if the authors had considered triangulating methods rather than juxtaposing an intersectional approach with empirical quantitative work, and if they had not presented qualitative work as the only answer and quantitative work as uniformly unacceptable (Crossman 2007; Smith 2007). This line of argument gives an indication of how dominant the positivistic paradigm in health-risk research is.

Discussion and suggestions for further research

Asking what it means for health-risk researchers to practise intersectionality highlights the implications of translating a theoretical approach across fields and disciplines. One reason that there are so many calls for, but so few attempts to use intersectionality in health-risk research might be that there are some incompatibilities between intersectional theories and health-risk research. The problem lies, at least in part, in the degree of theorization that is common in health-risk. When trying to conceptualize intersectional theory in relation to health-risks, the theoretical conceptualization of health and risk are often very limited and treated as fixed categories—something that becomes problematic when taken with an intersectional framework. The concept of intersectionality has been developed as a frame for highlighting the complexities of oppression, not as a theory of how to predict human risk vulnerability and behaviours.

Returning to the question borrowed from Choo and Ferree (2010) about what it means for healthrisk researchers to practise intersectionality as a theoretical and methodological approach to inequality, our review shows that it means a variety of things. We found a few examples where intersectionality is not only applied and adjusted to existing knowledge; it also implies a shift away from acontextual examinations of risk, and encourages scholars to move beyond epidemiology and actively seek the meaning behind categories and variables (e.g. Dworkin 2006; Edge, 2013; Edge and Rogers, 2005; Hansen, 2012). However, given the three different styles of understanding intersectionality that were found by Choo and Ferree in sociology, we would say that the field of intersectional health-risk research is still at an early stage. Even though we have found examples of such research, both group and process centred, they are seldom related to theories of the ways in which the lived experience of oppression cannot be separated into single issues of class, race, and gender, or how it becomes intertwined with health-risks. Many studies do not even attempt to justify their methodological choices; others refer to McCall's intercategorical approach (2005), sometimes in passing. Here again there are exceptions where the intent is to develop intersectionality further by introducing alternative methods and analyses, but in most cases this is done with unblinking positivism, without questioning the use of categories per se or taking into account the complexities of oppression—in other words, the main objective is still how to predict risk vulnerability and behaviour. In the final discussion, we will suggest a possible way forward.

Doing risk?

Often under the umbrella of governmentality studies, researchers have been problematizing the outcomes of health-risk analyses from intersectional perspectives. They argue that the use of risk, risk calculation, and risk prevention is a type of normalizing politics that connects human bodies with policy issues and constitutive power. Following Foucault (1990), normalcy can be said to constitute a new power order among many in society, one connected to the new processes that he refers to as

the biopolitics of the population, designed to regulate the population and control the body as the bearer of life—processes concerned with controlling reproduction, birth, mortality, health, domestic hygiene, and so on. The simple distinction between normal and pathological seen in earlier biopolitical analyses has been superseded by strategies for governing risk at a number of levels: strategies that seek to reduce aggregate levels of risk across a population; strategies for the management of high-risk groups; strategies based on risk identification and interventions for individuals at risk. Finally, combined with this stance, intersectional approaches have also brought home to health-risk researchers the question of the reproduction of power. After all, 'whose interests are served by particular regulations and practices within health care institutions?' (van Mens-Verhulst and Radtke 2006, 8). Hence, there is an abiding need for power-critical risk studies of how gender, ethnicity, class, and generation impact on how risk is done, and, above all, researchers make far too little use of established intersectional research in fields such as gender studies, critical white studies, black feminism, queer theory, and masculinity studies.

We therefore want to propose 'doing risk' as a possible way forward, a new approach that echoes the 'doing gender' of gender studies (Fenstermaker and West 2002), which can also overcome the dividing lines of health-risk research and intersectionality. For those not familiar with the 'doing gender' approach, there is a succinct account in West and Zimmerman (1987), who introduced the concept, arguing that gender should be understood as a routine, methodical, and iterative accomplishment. This means that gender is seen as a dynamic construct of social power relationships under specific historical circumstances, shaping people's lives in fundamental and often contradictory ways. Bringing such an approach more clearly into health-risk research will contribute to a better understanding of how health risks structure action and thought as well as power relations.

To understand risk as 'doing' implies that it has to be analysed as actively produced and reproduced at various levels and in diverse contexts in human life. It integrates a process-oriented understanding of risk with other theories of inequalities and power relations. Risk, by extension, rather than a set of rigid categories, is in fact construed and (re)produced in power relationships (Heyman, Alaszewski, and Brown 2012), with doing risk being closely connected to the processes by which the norms of gender, ethnicity, and class are socially and performatively inscribed in language, minds, and bodies (Butler 1990). To better explore the doing and undoing—or the performance (Butler 1993; Beck 2009)—of risk in social discourses and practices, in studying the performance of risk in a context of power, we would hope to see scholars study practices that simultaneously (re)produce and hide socio-political norms and positions, as these play out in contemporary, hierarchical relations of power and knowledge (see Hannah-Moffat and O'Malley 2007; Rose 2008). Clearly, it will be important to explore the concept of risk's expression, signification, and operation, its use as a control mechanism to limit action and thought, and its internalization in individualized self-regulatory practices in health as well as in other areas of life and society. The benefit is also that when we open up the 'doing gender' framework, we can create a space for engaging theoretically in rethinking the calculations of, for example, health risk as lived experience, and the ways in which these intersect with, say, gender, class, sexuality, or race. In line with an intersectional approach, this paves the way for construction as well as deconstruction. By taking intersectional theory as a starting-point, everyday lived experience can be understood as an embodied practice—a site where social meanings and knowledge are inscribed. People develop a situated risk-consciousness of their location within relations of power, and act strategically to reproduce or resist the specific discursive and practical relations that locate them. The places and spaces of our everyday lives then play a central role in the

ways in which identities are performed, and the doing of risk is part of this: to do risk is to act with the possibility that something will happen. Our bodies have a direct impact on how we experience risk, and our experiences are mediated by our bodies, whether we are young, old, male, female, transsexual, white, black, able-bodied, and so on: each factor has to be taken into account, but not as a separately fixed category and not in relation to a fixed risk.

References (* included in the review)

- Beck, U. (2009). World at Risk. Cambridge: Polity Press.
- Birke, L. (2000). 'Sitting on the fence: Biology, feminism and gender-bending environment.' *Women's Studies International Forum*, 23(5): 587–599.
- Butler, J. (1990). Gender Trouble: Feminism and the Subversion of Identity. New York: Routledge.
- Butler, J. 1993. Bodies that Matter: On the Discursive Limits of 'Sex'. New York: Routledge.
- Chávez–Rodríguez, L. (2013). Climate change and gender: the significance of gender in the social vulnerability to extreme weather events in regions under flood risks.

 Doctoral thesis. University of Bremen.
- Choo, H. Y. and Ferree, M. M. (2010). 'Practicing intersectionality in sociological research: a critical analysis of inclusions, interactions and institutions in the study of inequalities.' *Sociological Theory* 28(2): 129–49.
- Cole, E. R. (2009). 'Intersectionality and research in psychology.' *American Psychologist* 64(3): 170–80.
- Collins, P. H. & Andersen, L. M. (2007). *Race, Class and Gender: An Anthology* (Vol. 5). Belmont: Wadsworth Thompson Learning.
- *Collins, P. Y., von Unger, H. and Armbrister, A. (2008). 'Church ladies, good girls, and locas: stigma and the intersection of gender, ethnicity, mental illness and sexuality to HIV risk.' *Social Science and Medicine* 67: 389–97.
- *Collins, T. W, Grineski, S. E, Chakraborty, J, and McDonald, Y. J. (2011). 'Understanding environmental health inequalities through comparative intracategorical analysis: racial/ethnic disparities in cancer risks from air toxics in El Paso County, Texas.'

 Health and Place, 17: 335–44.
- Crenshaw, K. (1989). 'Demarginalizing the intersection of race and sex: a black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics.' *University of Chicago Legal Forum* 139: 139–67.
- *Cossman, J. S. (2007). Book Review: Gender, Race, Class, and Health: Intersectional Approaches. *Teaching Sociology* 35(4): 375–376.

- Davis, K. (2008). 'Intersectionality as Buzzword: a Sociology of Science Perspective on what makes a Feminist Theory Successful.' *Feminist Theory* 9(1): 67–85.
- *Dworkin, S. L. (2006). 'Who is epidemiologically fathomable in the HIV/AIDS epidemic? Gender sexuality and intersectionality in public health.' *Culture, Health and Sexuality: an International Journal for Research, Intervention and Care* 7(6): 615–23.
- *Edge, D. (2013). 'Why are you cast down my, o my soul? Exploring intersections of ethnicity, gender, depression, spirituality and implications for black British Caribbean women's mental health.' *Critical Public Health* 23(1): 39–48.
- *Edge, D. (2008). ' "We Don't see Black Women Here": an exploration of the absence of black Caribbean Women from clinical and epidemiological data on perinatal depression in the UK.' *Midwifery* 24: 379–89.
- *Edge, D. and Rogers, A. (2005). 'Dealing with it: black Caribbean Women's response to adversity and psychological distress associated with pregnancy, childbirth and early motherhood.' *Social Science & Medicine* 61: 15–25.
- Fenstermaker, S and West, C. (2002). Doing Gender, Doing Difference: Inequality, Power and Institutional change. New York: Routledge.
- Flynn, R. (2006). 'Health and Risk'. In G. Mythen & S. Walklate (eds.). *Beyond the Risk Society.*Critical Reflecions on Risk and Human Security. Berkshire: Open University Press.
- *Ford, C. L. and Airhihenbuwa, C. O. (2010). 'The public health critical race methodology: praxis for antiracism research.' *Social Science and medicine* 71: 1390–8.
- *Hancock, A. M. 2007. 'When multiplication doesn't equal quick addition: examining intersectionality as a research paradigm.' *Perspective on Politics* 5(1): 63–79.
- *Hankivsky, O. (ed.) (2011). *Health inequalities in Canada: intersectional frameworks and practices.* Vancouver: University of British Columbia Press.
- *Hankivsky, O. (2006). 'Beijing and beyond: women's health and gender based analysis in Canada.' *International Journal of Health Services* 36(2): 377–400.
- *Hankivsky, O. and Christoffersen, A. 2008. 'Intersectionality and the determinants of health: a Canadian perspective.' *Critical Public Health* 18(3): 1–13.
- Hannah-Moffat, K. and O'Malley, P. (2007) (eds.). Gendered Risks. London: Routledge.
- *Hansen, H. (2012). 'The "new masculinity": addiction treatment as a reconstruction of gender in Puerto Rican evangelist street ministries.' *Social Science & Medicine* 74: 1721–8.
- Heyman, B., Alaszewski, A. and Brown, P. (2012). 'Health care through the "lens of risk" and the categorisation of health risks—An Editorial'. *Health, Risk and Society* 14(2): 107–115.

- Hindman, M. D. (2011). 'Intersectionality: towards an understanding of discursive rethinking marginalization.' *New Political Science* 33(2): 189–210.
- *Hinze, S. W., Lin, J. and Andersson, T. E. (2012). 'Can we capture the intersections? Older Black women, education, and health.' *Women's Health Issues* 22(1): e91–e98.
- *Iyer, A., Sen, G. and Östlin, P. (2008). 'The intersections of gender and class in health status and health care.' *Global Public Health: An International Journal for Research, Policy and Practice* 3: 13–24, 51.
- *Kelly, U. A. (2009). 'Integrating intersectionality and biomedicine in health disparities research.' *Advances in Nursing Science* 32(2): 42–56.
- *Klinge, I and Bosch, M. (2005). 'Transforming Research Methodologies in EU Life Sciences and Biomedicine. Gender-Sensitive ways of Doing Research. State of the Art.' EJWS 12(3): 377–395.
- *Kohn, L. P. and Hudson, K. M. (2002). 'Gender, ethnicity and depression: intersectionality and context in mental health research with African American women.' African American Research Perspectives 8: 174–84.
- Lutz, H., Herrera Vivar, M. T. and Supik, L. (2011). *Framing Intersectionality: Debates on a multi-faceted concept in gender studies*. Farnham: Ashgate.
- Lykke, N. (2011). 'Intersectional analysis: black box or useful critical feminist thinking technology? In Lutz, Herrera Vivar, and Supik (ed.) *Framing Intersectionality.*Debates on a Multi-Faceted Concept in Gender Studies. Farnham: Ashgate pp. 207–221.
- Marmot, M. (2004). Status syndrome: how your social standing directly affects your health and life expectancy. London: Bloomsbury.
- *Martin, M. A. and Lippert, A. M. (2011). 'Feeding her children, but risking her health: the intersection of gender, household food insecurity and obesity.' *Social Science and Medicine* 74: 1754–64.
- McCall, L. (2001). *Complex inequality: gender, class, and race in the new economy.* New York: Routledge.
- McCall, L. 2005. 'The complexity of intersectionality.' *Signs: Journal of Women in Culture & Society* 30(3).
- *Mens-Verhulst, J. van, & Radtke, L. (2006). *Intersectionality and Health Care: Support for the Diversity Turn in Research and Practice*. Retrieved June 26, 2009, from www.vanmens.info/verhulst/en.
- *Nack, A. (2007). 'Gender, race, class and health: intersectional approaches, ed. by Amy J. Schulz and Leith Mullings.' [Book review] Gender and Society 21: 297.

- Olofsson, A. (2011). 'An intersectional analysis of risk perception.' Conference paper presented at European Sociological Association 10th conference in Geneva, September 7–10, 2011.
- Prins, B. (2006). 'Narrative accounts of origins: a blind spot in the intersectional approach?' European Journal of Women's Studies 13(3): 277–90.
- *Romagnoli, A. and Wall, G. (2012). '"I know I'm a good mom": Young, low income mothers' experiences with risk perception, intensive parenting ideology and parenting education programmes.' *Health, Risk & Society* 14(3): 273–89.
- Rose, N. (2005). 'In search of certainty: risk management in a biological age.' *Journal of Public Mental Health* 4(3):14–22
- Rose, N. (2008). 'Race, risk and medicine in the age of "your own personal genome".' *BioSocieties* 3(4): 425–41.
- *Rosenfield, S. (2012). 'Triple Jeopardy? Mental health at the intersection of gender, race, and class.' *Social Science & Medicine* 74: 1791–1801.
- *Rosenthal, L. and Lobel, M. (2011). 'Explaining racial disparities in adverse birth outcomes: unique sources of stress for Black American women.' *Social Science & Medicine* 72: 977–83.
- *Schultz, A. J. and Mullings, L. 2006 (eds.). *Gender, race, class and health: intersectional approaches.* San Francisco: Jossey Bass.
- *Schwartz, S and Meyer, I. H. (2010). 'Mental health disparities research: The impact of within and between group analyses on tests of social stress hypotheses'. *Social Science and Medicine*, 70: 1111–18.
- *Sen, G and Iyer, A. (2012). 'Who gains, who loses and how: leveraging gender and class intersections to secure health entitlements.' *Social Science & Medicine* 74: 1802–1811.
- *Seng, J. S, Lopez, W. D., Sperlich, M., Hamama, L. and Reed Meldrum, C. D. (2012).

 'Marginalized identities, discrimination burden, and mental health: empirical exploration of an interpersonal-level approach to modelling intersectionality.'

 Social Sceince & Medicine 75: 2437–45.
- *Shaw, L. R., Chan, F., and McMahon, B. T. (2012). 'Intersectionality and disability harassment.' *Rehabilitation Counseling Bulletin* 55(2): 82–91.
- *Shim, J. K. (2002). 'Understanding the routinised inclusion of race, socioeconomic status and sex in epidemiology: the utility of concepts from technoscience studies.'

 Sociology of Health & Illness 24(2): 129–50.
- *Smith, G. D. (2007). 'Gender, Race, Class, and Health: Intersectional Approaches.' [Book review] *New England Journal of Medicine* 356: 317–18.

- *Veenstra, G. (2011). 'Race, gender and class and sexual orientation: intersecting axes of inequality and self rated health in Canada.' *International Journal for Equity & Health* 10(1).
- *Viruell-Fuentes, E. A., Miranda, P. Y. and Abdulrahim, S. (2012). 'More than culture: structural racism, intersectionality theory and immigrant health.' *Social Science & Medicine* 75: 2099–2106.
- *Warner, D. F. and Brown, T. H. (2011). 'Understanding how race/ethnicity and gender define age-trajectories of disability: an intersectional approach.' *Social Science & Medicine* 72: 1236–48.
- *Weber, L. (2006). 'Reconstructing the landscape of health disparities research: promoting dialogue and collaboration between feminist intersectional and biomedical paradigm.' In A. J. Schultz and L. Mullings *Gender, race, class and health:*intersectional approaches. San Francisco: Jossey-Bass. pp.21–59
- West, C. & Zimmerman, D. (1987). 'Doing gender', Gender and Society 1(2): 125-51.
- Wilkinson, I. (2009). Risk vulnerability and everyday life. London: Routledge.

Articles included in the review but not referred to in the present article

- Acevedo-Garcia, D. (2012). 'Special issue introduction: Place, migration and health.' *Social Science & Medicine*, 75: 2055–9.
- Ayo, N. (2012). 'Understanding health promotion in a neoliberal climate and the making of health conscious citizens.' *Critical Public Health*, 22(1): 99–105
- Baidoobonso, S, Bauer, G R. Speechley, K, and Nixon Lawson, E. (2013). 'HIV risk perception and distribution of HIV risk among African, Caribbean and other Black people in a Canadian city: mixed methods results from the BLACCH study.' *BMC Public Health*, 2(13): 184.
- Bowleg, L., Teti, M, Malebranche, D. J., and Tschann, J. M. (2013). 'It's an Uphill Battle Everyday.' *Psychology of Men & Masculinity*, 14(1), 25–34.
- Briggs, C. L. (2005). 'Communicability, racial discourse, and disease.' *Annual Review of Anthropology, Annual*, 269(23).
- Conwill, W. L. (2010). 'Domestic Violence among the Black Poor: Intersectionality and Social Justice.' *International Journal for the Advancement of Counselling*, 32(1), 31–45.
- Douglas, J., and Watson, N. (2013). 'Resistance, resilience and renewal: the health and well-being of black women in the Atlantic Diaspora—developing an intersectional approach.' *Critical Public Health*, 23(1): 1–5.

- How to cite: Giritli-Nygren, Katarina & Olofsson, Anna. (2014). Intersectional approaches in health-risk research: a critical review. *Sociology Compass*, 8(9) 1112–1126.
- Graham, L., Brown-Jeffy, S., Aronson, R., and Stephens, C. (2011). 'Critical race theory as theoretical framework and analysis tool for population health research.' *Critical Public Health*, 21(1), 81–93.
- Hankivsky, O. (2012). 'Women's health, men's health, and gender and health: Implications of intersectionality.' *Social Science & Medicine*, 74: 1712–20.
- Hirschmann, N. J. (2012). 'Disability as a New Frontier for Feminist Intersectionality.' *Research, Politics & Gender*, 8(3): 396–405.
- Jones, A. (2009). 'Social Marginalization and Children's Rights: HIV-Affected Children in the Republic of Trinidad and Tobago.' *Health Social Work*, 34(4): 293–300.
- Kaiser, N. (2011). Mental health problems among the Swedish reindeer-herding Sami population in perspective of intersectionality, organisational culture and acculturation. Umeå University Medical Dissertations, New Series No 1430.
- Kuhlmann, E., and Babitsch, B. (2002). 'Bodies, health, gender? Bridging feminist theories and women's health'. *Women's Studies International Forum*, 25(4): 433–42.
- Malmusi, D., Borrell, C., and Benach, J. (2010). 'Migration-related health inequalities: Showing the complex interactions between gender, social class and place of origin.' *Social Science & Medicine*, 71(9): 1610–19.
- Persson, A., and Richards, W. (2008). 'Vulnerability, gender and "proxy negativity": Women in relationships with HIV-positive men in Australia.' *Social Science & Medicine* 67(5): 799–807.
- Raphael, D. (2011). 'A discourse analysis of the social determinants of health.' *Critical Public Health*, 21(2), 221–36.
- Richards, E., et al. (2013). 'Going beyond the surface: Gendered intra-household bargaining as a social determinant of child health and nutrition in low and middle income countries.' *Social Science & Medicine*, 95, 24(10).
- Sharman, Z., and Johnson, J. (2012). 'Towards the inclusion of gender and sex in health research and funding: An institutional perspective.' *Social Science & Medicine*, 74(11): 1812–16.
- Springer, K. W. Hankivsky, O., and Bates, L. M. (2012). 'Gender and health: Relational, intersectional, and biosocial approaches.' *Social Science & Medicine*, 74(11): 1661–6.
- Springer, K. W., Mager Stellman, J., and Jordan-Young, R. M. (2012). 'Beyond a catalogue of differences: A theoretical frame and good practice guidelines for researching sex/gender in human health.' *Social Science & Medicine*, 74(11): 1817–24.
- Stewart, A. J., and Mcdermott, C. (2004). 'Gender in psychology.' *Annual Review of Psychology*, 55: 519–44.

- Tolhurst, R., et al. (2012). 'Intersectionality and gender mainstreaming in international health: Using a feminist participatory action research process to analyse voices and debates from the global south and north.' *Social Science & Medicine*, 74(11): 1825–32.
- Verdonk, P., and Klinge, I. (2012). 'Mainstreaming Sex and Gender Analysis in Public Health Genomics.' *Gender Medicine*, 9(6): 402–410.
- Vinz, D., and Dören, M. (2007). 'Diversity policies and practices—a new perspective for health care.' *Journal of Public Health*, 15(5): 369–76.
- Wiley, L. F. (2010). 'Mitigation/Adaptation and Health: Health Policymaking in the Global Response to Climate Change and Implications for Other Upstream Determinants.' *Journal of Law, Medicine & Ethics*, 38(3): 629–39.
- Williams, W., Karlin, T., and Wallace, D. (2012). 'Project SisterCircle: Risk, Intersectionality, and Intervening in Urban Schools.' *Journal of School Counseling*, 10(17).

¹ The term 'health-risk research' is used in as a generic term encompassing medical research, public health-research and social medicine-research, and critical health-research.

² Primo® is a discovery-and-delivery solution for local and remote resources, such as books, journal articles, and digital objects. It allows users to search in a single sweep across the full breadth of content from all university library collections, both locally, nationally, and internationally. In our search, a large number of databases including both full-text and reference material, were included (for example, EBSCO, InformaWorld, JSTOR, SAGE Journals On-line, SCOPUS, Sociological Abstracts, Taylor and Frances Online Journals, and Web of Science).

³ Of the 4,906 publications, 4,157 were journal articles, 964 were reviews, 409 were books, 21 were Ph.D. theses, and about 200 were other types of publication (for example, conference papers and newspaper articles).

⁴ In analysing intensive mothering, Romagnoli and Wall, publishing in *Health, Risk & Society* in 2012, use the idea of intersecting structures—in other words, gender and social class—in a neoliberal, theoretical framework. Their analysis can be seen as an intersectional approach, but, since they make no reference to the literature on intersectionality, their contribution has not been included in the present review.