The Man Made World: The Social Production of Health and Disablement in Construction Workers Amy Sorensen

Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Sociology

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> 04 August 2011 Blacksburg, VA

Keywords: Occupational Health, Disability, Social Production of Health/Illness, Body Studies, Social Theory, Construction Workers

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(ABSTRACT)

This study focuses on the mechanisms through which systems of inequality operate in relationship to health and disablement processes. Using quantitative data from the National Longitudinal Study of Youth 1979 and qualitative data from in-depth interviews with twelve construction workers in the southeastern United States, this study evaluates the relationships among race, class, gender, and occupation in the health of male construction workers. More specifically, this research examines white working-class masculinity in the context of working within the construction industry, and in relationship to health and disability processes. Each chapter in this dissertation focuses on one of three primary research questions. First, how do race, class, gender, and occupation shape the health of construction workers? Second, how does working-class masculinity and occupation affect patterns of disablement among construction workers, and how do they experience these processes? And finally, how do social inequalities shape bodies? This study finds that race, class, gender, and occupation all play multiple roles in the health and disablement processes of workers. These findings also suggest that a reconceptualization of disability as a process is necessary to best reflect the experiences associated with occupational disability. Finally, these findings point to the body as a social process, with direct ties to the larger social structure and systems of inequality. This study extends our conceptualizations of health, disablement, and the body as processes. In addition, it illuminates the mechanisms through which systems of complex inequalities operate to create health disparities.

DEDICATION

I am poignantly aware of the moment that sparked the beginning of this project. On a hot summer day, I sat in my shade-parked car with the air conditioner blaring and watched my husband finish his work for the day. I was first aware of the length and tone of the muscles in his back and arms as he broomed the concrete driveway he had just made. The work an integral part of how his body looks, the way it performs, his not-always-slight limp. As I stared, envious of the way he is in his body, which is so very different from the way that I am in my own, I became aware of the way that the sweat poured from him. It wet the concrete even as the blazing sun attempted to finish the job quickly. A part of him, held forever in concrete, imperceptible to eyes that did not see this intimate moment between a man and his work, the moment that a man has built part of the world. And in that voyeuristic instant, this project was born. Without his willingness to put himself out there, in the being-built world, I would never have been able to get here to do the work that I do. My hope is that anyone who reads this becomes aware, the way that I became aware, of the million beads of sweat, the multiple drops of blood, the laughter, pride, frustration, and fear that gets into the very foundation of all that is built around us. I hope that we become aware of the very personal relationship between body and built world. For all of these things, I dedicate this to my husband, Lynn.

ACKNOWLEDGMENTS

I would like to acknowledge my committee and their tireless work on my behalf. In this, the last leg of my educational journey, your willingness to go the extra mile and truly approach your work as educators and scholars from a feminist perspective has made all the difference in my ability to be successful. For the advice, the discussions, the reading and the writing, moral support, and guidance – I am truly thankful.

Toni Calasanti – I cannot imagine having worked with anyone else. I am so truly grateful for your mentorship, your unwavering professionalism, your dedication to quality scholarship, moments of laughter, and advice. I am appreciative of the challenges that you have presented to me, and the support you have so freely given. Thank you.

Barbara Ellen Smith – You are truly an inspiration. I am so appreciative of your unfaltering graciousness, your dedication to shining a light on inequality, the fact that at times your words required me to think hard to get to them, and when it counted you could speak Appalachian too. Thank you.

Neal King - I am so grateful for your support throughout this endeavor, all your thoughtful letters on my behalf. I am also peculiarly appreciative of your willingness to check the preciseness of my language and keeping me on the theoretical straight and narrow. It has been a joy to work with you.

Karen DePauw – Thank you for your willingness to help me find avenues for success. Despite a terribly busy life, you have always found time to work with me on this project. Thank you for so many things.

To the entire faculty in the Sociology department at Virginia Tech - I appreciate all the support, guidance, and knowledge you have shared with me along the way.

To Brenda Husser, the lady with ALL the answers. Thank you for all the times you have figured it all out for me. You are a blessing to the department, and all those around you.

To Tish Glosh, for your empathetic ear, your joy, musical interludes, and ability to get it all done. Thank you!

To Shelton Norwood, the guy who keeps the gears turning, and the papers shredded. Thanks for the laughs, and letting me nap.

To my mama – Well, I can't acknowledge you enough here. You have always been my hero and my idol. You have always pushed me to do well, and let me rest when I am tired, and been wise enough which one was necessary. I am humbled by your sacrifice, and all your strength, and beauty, and wisdom, and grace, well-placed use of expletives, ferociousness, and tenderness. Thank you for teaching me the word for everything around me, instilling a sense of inquisitiveness, and for playing the "guess what kind of underwear they are wearing" until you created a sociologist. I love you.

To all my children – I appreciate the sacrifices you have made while I have been in school. I know there were places you wanted to go, things you wanted to do, and people you wanted to

see. I also know that you are the reasons I am able to do this, the inspiration for my moving forward.

To my son, Johnny – Thank you for your help through the last couple of years. You are such a remarkable young man.

To my son, Justin - I am so very proud of the man you are becoming, smart, resilient, reflective, fun-loving, and full of swag. I know you will go far, and am so glad that you are mine. Above all, thank you for your honesty.

To my son, Joey – I am so impressed with you. Thank you for being such a big help while I have worked on this. I don't know what I would do without you here.

To my daughter, Autumn – Thank you for always asking how my day was, and for hanging out together, and for giving me things to laugh about. You are, of course, my hero in so many ways.

To my husband, Lynn – Well, I already acknowledged you in the dedication, but of course, thank you for all your love and support, and fixing of the pieces. You truly are the best husband anyone could wish for. I love you.

Laura Boutwell – without you, this would have been an exercise in futility (and insanity). You are a light in the world and I am so grateful that I have been allowed the privilege of basking in your sunshine for these four years. Thank you for the talks, and the unwavering loyalty (even when I'm wrong), and your friendship.

Laura Agnich, Meredith Katz, Njeri Kershaw, and Sara McDonough – I am so thrilled to have met you all. You are all brilliant, beautiful, strong women who will now go out and inspire generations of brilliant, beautiful, strong women. Thank you for all the help, without you I could not have finished this... your advice, drinks, laughter, and rides rides rides. Thank you!

All the other students, whose names I am not mentioning one by one, because after all I do have to let readers eventually get to the meat of the matter. I wish you all the best of luck and hope that we all take something from this experience called grad school. I am looking forward to hearing about all of your journeys.

To my friend Elaine – Without your ear to bend in half I would have never made it this far. For all the years of laughter and frustration and joy and tears.... You are such a great best friend. Thank you.

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CHAPTER 1

Introduction

This study focuses on the mechanisms through which systems of inequality operate in relationship to health and disablement processes. More specifically I look at the relationship among gender, race, class, and occupational inequalities (including the intersections of these inequalities) and the health outcomes of men working in the construction industry. In what follows, I offer a brief introduction to the literature that informs this study. This is followed by the specific research questions and an overview of the methodological and epistemological approaches of my work. I outline the importance of my project to multiple audiences, and introduce the three chapters that highlight the findings of this study. I do this with the goal of not merely repeating the information within the chapters themselves, providing instead more general information than is contained within the chapters.

General Literature Review

Perspectives on Health and Disability

In the last few decades, medical sociology has expanded rapidly. Social scientists have studied the medical establishment as well as the relationship between social structure and the distribution of disease (Conrad 2009). The Western medical tradition historically has been tied to biologically-based positivist science (Nettleton 2006). Medical systems of discourse and practice have substantial power within Western societies, as they define, classify, and legitimize conditions affecting health (Nettleton 2006; Shildrick & Price 1999). The discursive power of Western medicine is such that it has created a moral health imperative (Lupton 1995). In other words, the power of the medical system is pervasive enough that its discourse on what health *is* has been integrated into the larger ideology of Western society as a matter of moral obligation for the citizen (and, in some instances, the state). At the same time, the medical system has failed to

consider the social determinants of health and health disparities (Nettleton 2006).

The existence of social determinants of health is well-documented (Centers for Disease Control and Prevention 2011). While many other areas of health disparity have been observed, most studies focus on race, class, and gender. Courtenay (2000) looks at the relationship between gender and health, finding that masculinity may play a major role in men's health problems through patterns of health care utilization and lifestyles. Williams and Collins (1995) offer a review of racial and class health disparities. They find that, regardless of how class is measured, it has proven to be one of the strongest predictors of health outcomes, with those of lower socioeconomic status exhibiting poorer health. They also find that throughout history, Blacks have exhibited higher mortality and morbidity than have whites, and these trends continue today. In addition, research on the health of Hispanics in the United States has yielded mixed results, showing a disparity between U.S. born and foreign born Hispanics, with U.S. born Hispanics suffering from a multitude of health problems. What is not fully understood are the mechanisms through which these areas of inequality operate in relationship to health outcomes.

Disability is one aspect of health in which we see disparities (Molla et al 2003). From a medical standpoint a disability is a condition that compromises a person's abilities in some manner (Altman 2001). The social model of disability (which is becoming more accepted within some medical discourse) defines a disability as a gap between individual abilities and the requirements of the social and physical environments (Altman 2001). The latter approach renders disability more historically-specific and situational – a product, in part, of environments that can be made more or less accessible and inviting to people with different abilities. Some social models of disability (like that proposed by Verbrugge and Jette, 1994) also include acknowledgment of how external environments create risk factors for disability to occur. Still,

some scholars have argued that the social model lacks adequate recognition of the subjective experience of the conditions associated with disability (Hughes & Paterson 1997). Scholars have also described disability as a process (Verbrugge & Jette 1994), dynamic rather than static (Zola 1989), and a spectrum (Altman & Barnartt 2000). This study seeks to explore disability as a dynamic process linked to inequalities within the larger social structure and evaluate how current conceptualizations of disability operate in relation to lay understandings of disability.

Disparities in the types, severity, and prevalence of disability can often be linked to social determinants. Though many such inequalities exist, throughout this study I will focus primarily on class and gender. One of the most pervasive areas of disability disparity is linked to class (and related measures such as poverty) (U.S. Census Bureau 2005). Some of the primary concerns associated with class and disability include adequate health resources (including health care and nutritious diets) and dangerous physical environments. Beyond this, it is difficult to decipher the direction of causation between class and disability, as those who are poor are more likely to have a disability and those with a disability are more likely to be poor (U.S. Census Bureau 2005). There are also gendered differences in frequency of disability, as women are more likely to acquire disabilities (Asch et al 2002). Gender may also influence the causes of disabilities in that, for women, their presence may be related to the widespread feminization of poverty. Disabilities in men may often be related to the social requirements and enactment of masculinity. Masculinity has been described as encouraging a detachment from the formal health care system, risk-taking behaviors, and participation in dangerous and physically demanding occupations (Bird & Rieker 2008; Courtenay 2000; Williams 2003).

Laboring Bodies and Occupational Health

Historically, the body in sociology has been treated as an "absent presence" (Shilling

2003). We cannot say that sociology has adopted a completely disembodied approach, as the classical focus on social structure and function made the acknowledgment of embodied existence necessary (Shilling 2003). However, the study of the body has more often than not been implicit rather than explicit, especially in classical sociology (Shilling 2003; Turner 2001). In recent years, this has changed with the body becoming more central for many sociologists including Elias, Goffman, Bourdieu, Foucault, and a host of feminist scholars (Shilling 2003). While the body has become more central to many sociological theories, there is little agreement on the nature of the body. Often tied to larger ontological and epistemological paradigms, the body has been described variously as a social construction, experience, and material. This lack of consistency, while enriching the field of sociology of the body, also creates theoretical points of tension. This study offers an opportunity to explore the body as a social process, tied to larger systems of inequality.

Throughout history, the body has been the primary form of production power. From subsistence to the capitalist system, survival has depended upon the work performed by bodies. Early sociological discussions of the body at work, by Marx (1988/1844) and Engels (1892), explored the relationship among the body, labor power, capitalism, history, and spatial location. Marx (1988/1844) described the body as the location of labor power, from which capitalists could extract profit, and through which the proletarian would receive payment. However, for Marx and Engels the body was not just the source of labor power, but also the outcome of the labor process. They discussed the ways in which the process of work shaped and altered the bodies of workers.

Occupational health, situated as it is within the larger public health discourse, offers opportunity for the application of social scientific research (Forthofer 2003). However,

occupational health statistics are often regarded as reflecting the physical and technical nature of a given industry or occupation, with little or no recognition for the ways in which social relationships (e.g., between supervisors and workers) affect occupational health. Occupation has been tied to health disparities that are patterned similarly to more general health disparities, especially those of race, class, and gender (Souza, Steege, & Baron 2010; Williams 2003). It has proven more difficult to evaluate the relationship between occupational health and general health measures (Souza, Steege, & Baron 2010).

Why Construction?

Construction in general

The construction industry is one of the largest and most dangerous in the United States (BLS 2010a). The rate of non-fatal injury/illness resulting in days away from work for the construction industry is higher (4.7 per 100 workers) than the national rate (3.9 per 100 workers) for all private industries (BLS 2009a). Additionally, in 2009 workers in construction suffered the most fatal injuries of any private sector industry (BLS 2010a). Not only are those who work in this industry particularly vulnerable to job-related accidents resulting in injury or death, but the aggregated effects of physical labor can result in chronic conditions leading to disability (BLS 2008).

In addition to the staggering statistics about the risk to health and well-being posed by a career in construction, the industry offers a unique location from which to view gender, race, and class. Even today, the construction industry remains largely gender segregated with around 90% of the workers being male (United States Census Bureau 2000). Positions within the construction industry, outside of general contract management, are filled primarily by working-class men. Historically, construction work has been a popular choice for male immigrant laborers

(Applebaum 1999), and this trend continues today with an increasing number of Hispanic workers filling its ranks. However, it is still predominantly a white occupation. According to the United States Census Bureau (2000), 76.5% of construction workers are white, 14.7% are Hispanic, and 5.4% are Black. Thus, the construction workforce consists primarily of white, working-class men.

The specific structure of the construction industry is also important. As mentioned previously, stability of work has implications for health, safety and disability. Unlike most other occupations in which individuals go to work in the same space day after day, construction job sites constantly change. Workers must negotiate changing physical and social environments on a regular basis. In addition, most construction workers work directly for small sub-contractors. However, each new project may be for different general contractors, architects, engineers, and owners. Thus, the hierarchical relationships are also constantly fluctuating, requiring renegotiation.

The historical context of the construction industry also has implications for health and disability. At the height of Fordism, workers in the unionized construction industry held a valorized status within the hierarchy of working-class occupations (Paap 2006). The construction worker epitomized hard labor, and, unlike some other occupations (e.g. coal mining), was visible to the general public as he built buildings into the sky. The construction industry has lost ground with de-unionization and deindustrialization (Erlich & Grabelsky 2005). Laborers, once protected by powerful unions, now face unreliable job conditions including low wages, few benefits, and sporadic work schedules (Erlich & Grabelsky 2005). Currently, with the United States in the grips of a major recession, these issues are exacerbated. While unemployment inched down for the US labor force overall in January 2010, the construction industry lost 75,000

jobs, increasing the total job loss in that industry to 1.9 million since December 2007 (BLS 2010b). The precariousness of these jobs in the current economy may increase the likelihood that workers will participate in risky work behaviors to ensure their retention on the job and position within the overall job hierarchy (Walter, Bourgois, & Loinaz 2004).

Perhaps most important to the health and well-being of workers are the underlying social relations within the workplace (Smith 1981). These social relations may be lateral (between workers of equal status) or hierarchical (between workers of unequal status or between workers and supervisors/owners). Many of the mechanisms through which occupational health and disability disparities are created are grounded in these social relationships. For instance, research has shown that the lateral relationships involved in the enactment of working-class masculinity may result in safety risks on construction sites (Paap 2006). Precarious hierarchical relations can also lead to danger on the job (Paap 2006).

Masculinity in Construction

The culture of construction is tied to the physical labor and pride associated with the work, creating a particular "ideal" type of working-class masculinity. From the standpoint of intersecting inequalities, construction workers' enactment is more than "doing masculinity" and "doing class". These laborers are called upon to perform a particular working-class masculinity, one that is situated within this historically heroic (and currently endangered) industry. This is a collective masculine identity (Connell 2005a) in which an informal 'Brotherhood' is formed. Workers become construction workers, not only through attachment to the industry, but also by embodying the weathered skin, lean muscles, and calloused hands created through the work itself.

Men from working class and poor backgrounds enact a different type of masculinity from

those of middle and upper class backgrounds (Connell 2005b). Gender (as well as race and class, and other dimensions of inequality) can be viewed as an accomplishment of interaction (both with other individuals and the social environment), rather than an individual attribute (West & Fenstermaker 1995; West & Zimmerman 1987). These accomplishments occur within particular contextual environments, including the work-place and the larger occupational structure. These contextual environments constrain choices and enactments.

Working-class masculinity is a subordinated masculinity, in that it does not meet the requirements of hegemonic masculinity (Connell 2005b). Subordinated masculinities are not associated with the same privileges as hegemonic masculinities. The subordination of working class masculinity has increased with the changing global economic system, which has shifted the American economy away from industrial production (Weis 2006). However, masculinities that are subordinated within the larger social structure exert hegemonic status within their own cultural group (Baron 2006). So while working-class masculinity may be subordinate to middleclass masculinity, it still exerts hegemonic status within similarly classed groups of people (i.e. white working-class men, will still enjoy privilege over black working-class men or white working-class women). Working class masculinity is a very physical masculinity, and focuses attention on activities like manual labor and the provision of protection and income for the family (Baron 2006). The enactment of this type of masculinity (and others) has been found to include significant risks to men's health including risk taking behaviors, little attachment (or access to) to the formal health care system, and insufficient health promotion behaviors (Courtenay 2000). Finally, because occupation is centrally tied to masculinity, occupation may matter to men's health differently than it does to women's health. This study provides a glimpse into the ways that occupation matters to men's health.

Research Questions

While the primary theoretical goal of this project is to explore the complex ties between social inequalities and health and disablement processes, I focus on a small aspect of this larger question. Specifically, this study looks at the relationship among gender, race, and class and occupational health processes of men working in the construction industry. I guide this exploration with three questions drawn from the existing literature: 1) How do race, class, gender, and occupation shape the health of construction workers? 2) How does working-class masculinity and occupation affect patterns of disablement among construction workers, and how do they experience these processes? And 3) How do social inequalities shape bodies? Each of these questions is explored in more detail by each of the three chapters.

Methods

The proposed study has a two-stage design, which uses multiple methods to answer these questions. Both social research and multiple methods are well-suited for studying the complexities of health inequalities, including disability (Forthofer 2003). While it is important to include biological influences, it is essential to incorporate the environment into any formulation of health (Freund & McGuire 1999). Resources, relationships, networks, and areas of inequality have all proven to be important indicators of health and disability. One of the aims of this project is to provide an illustration of the usefulness of sociological methods to lay bare the mechanisms through which inequalities affect processes of health and disablement.

Multiple Methods

Multi-method studies use more than one type of method, and can refer to any study that utilizes multiple types of data. The combination can include qualitative or quantitative methods, or a combination of the two (Jacobs 2005). The decision to use a multi-method research design is

fueled not only by the epistemological stance of the researcher, but also by the research questions.

One of the strengths of using multiple methods is the ability to counter weaknesses of one method with the strengths of another (Creswell & Plano Clark 2007). Existing quantitative data sets can offer general statistical information regarding health, disablement, and work. However, they lack the necessary depth to explore workers' experiences and interpretations of their work and health. In addition, it is impossible to interrogate the complex mechanisms of gender and class and how they relate to health and disability. For this study, I explore the health and disability trends among manual laborers in the construction industry through a quantitative secondary analysis of data from the Bureau of Labor Statistics' National Longitudinal Study of Youth 1979. I also investigate workers' experiences and their classed and gendered relationships through qualitative research.

General Overview of Study Design

The proposed project design is a multi-method, two-stage study focusing most immediately on the physical effects of long-term labor in the construction industry. It evaluates how masculinity, class, race, and physical labor interact within health and disablement processes. The use of both quantitative and qualitative data offers complementary information and minimizes the weaknesses of each type of data (Hunter & Brewer 2003). One of the important aspects of the quantitative portion of the research is that it strengthens the falsifiability of the primary assumption that working in construction has health consequences. The use of this data allows me to look at a representative sample of workers, increasing the statistical strength and potential for generalizability. The qualitative phase of this project offers many integral components to the study. First of all, it fills in the holes left behind by the secondary analysis of existing

quantitative data. While the quantitative analysis is designed to get a broad overview, the qualitative phase is designed for depth. It can also address issues that cannot be gleaned from the quantitative data including workers' experiences and interpretations, the complex social relationships involved, and the nuances of the classed and gendered aspects of these relationships.

Quantitative data is drawn from Bureau of Labor Statistics' National Longitudinal Study of Youth 1979 (NLSY79). In the quantitative phase of the project, I focus on three specific health measures as dependent variables: self-rated health, physical conditions, and organic conditions. A description of each of the measures can be found in the next section titled "Quantitative Measures." In order to look at the complex relationships between different areas of inequality and health outcomes, I use a combination of multiple OLS and binary logistic regressions.

Detailed information about analysis can be found within the individual chapters.

Qualitative data comes from in-depth interviews with twelve construction workers in the southeastern United States. The population of interest for this phase of research is male construction workers who are at least eighteen years of age. I selected a convenience sample of active construction work-sites at which to perform observations and recruit a convenience, partial snow-ball sample of workers to interview.

Semi-structured, face-to-face interviews were scheduled for a time and location convenient for individual participants. All interviews were audio-recorded for later transcription, and consent was obtained at the time of interview. All participants were given the opportunity to suggest other potential participants. Although exact content of interviews was continually updated throughout the research process, questions focused on work, health, and disability. Semi-structured questions allow full exploration of the topics that arise during the interviews as well as

leaving room for unexpected themes and topics to develop naturally from the narratives of participants. This also allows for the active and collaborative construction of meaning (Holstein & Gubrium 1995). A basic pool of questions is included in Appendix A.

Each of the three chapters uses different types of data. One chapter, "The Health of Construction Workers: Gender, Race, Class, and Occupational Determinants," uses both quantitative and qualitative data to investigate the relationship among race, class, gender, and occupation in construction worker health. The second chapter, "Wear and Tear: The Social Production of Disablement in Construction Workers," uses qualitative data to examine disablement as it occurs for construction workers over time. The final chapter, "Corporeal Power: Theorizing the Body in the Social Structure," is a theoretical chapter exploring the body as a social process, and is based on extensions to existing theories.

Quantitative Methods

Sample

The NLSY79 uses a nationally representative sample of 12,686 men and women who were 14 to 22 years of age when first surveyed in 1979. Within this sample, there were three subsamples: 6,111 youths representative of non-institutionalized civilian youths in the US in 1979 and born between 1957 and 1964; a supplemental sample of 5,295 designed to oversample civilian Hispanic, black, and economically disadvantaged non-black/non-Hispanic youths in the US in 1979 born between 1957 and 1964; and a military sample of 1,280 youths representing those born between 1957 and 1961 and who were enlisted in the active military forces as of September 30, 1978. Funding constraints limited the continuation of supplemental samples, affecting the military sub-sample after 1984 and economically disadvantaged non-black/non-Hispanic sub-sample after 1990. Face to face and/or telephone interviews with respondents were

conducted on an annual basis from 1979 through 1994. After 1994, the survey was shifted to a biennial schedule. The retention rate for this study has remained between 80 and 90% throughout the life of the project. Each round contains core questions on the following topics: labor market experiences, training investments, schooling, family income, health conditions, geographic residence and environmental characteristics, household composition, and marital and fertility histories, though the number of questions and specific wording have differed from year to year. From year to year additional questions have been used to investigate labor force attachment. Beginning in 1998, a set of health questions was added and administered as respondents reached age 40.

Quantitative Measures

Independent Variables

The multiple OLS regressions focus on three specific health outcomes as dependent variables: self-rated health, physical conditions, and organic conditions. Self-rated health is taken from a single question in the 40+ Health Assessment. For this question, respondents were asked about their general health status. This was scored from 1-5 (poor, fair, good, very good, excellent). The physical health index is determined by the total number of conditions related to the physical body reported by the respondent. It includes the following conditions (found in the 40+ Health Supplement): back problems; foot and leg problems; joint pain, frequent leg cramps, bursitis; lameness, paralysis, polio; trick shoulder, elbow, or knee; bone, joint, or other deformity; loss of finger or toe; osteoporosis; and fractured/broken bone in the last ten years. Respondents could score between zero and nine. The organic health indicator includes all other health conditions reported by respondents on the 40+ Health Supplement. These include: asthma; kidney and bladder problems; stomach or intestinal ulcers; high cholesterol; chest pain, pounding

heart, or other heart problem; low blood pressure; frequent colds, sinus, or allergies; indigestion, intestinal problems, gall bladder problems; depression, excessive worry, nervous problems; scarlet fever, rheumatic fever, tuberculosis, jaundice, or hepatitis; frequent headaches, dizziness, fainting; eye trouble (other than glasses); ears, nose, throat problems; severe tooth or gum trouble; skin diseases; thyroid trouble or goiter; adverse or allergic drug reaction; tumor, growth, or cyst; neuritis; epilepsy or fits; frequent trouble sleeping; frequent urinary tract infections; ulcers; hardening of the arteries; and anemia. Scores range from zero to twenty-five.

In addition, I run a binary logistic regression to ascertain the likelihood that particular groups of individuals will, at some point in time, have a work-related illness or injury. This measure is based on the index variable listed below as an independent variable (total number of work-related illnesses and injuries), which was turned into a dummy variable measuring whether or not the respondent had ever reported a work-related illness or injury during their participation in the NLSY79.

Independent Variables

Occupational typology is the primary independent variable in these sets of regressions. Each year, respondents were asked their industry and occupation. These were coded using Census occupational and industry codes. In order to determine occupational typology for the purposes of this study, I wish to differentiate between workers who have worked at some point in time as manual laborers in the construction industry, those who have worked manual labor but not within the construction industry, and those who have never worked in any manual labor occupation.

Using occupational descriptions in the Dictionary of Occupational Titles (DOT) (U.S. Dept. of Labor 1991), and occupational data from the NLSY79, I created a variable that measured which of these occupational categories applied to respondents, at the time of the administration of the

40+ Health Supplement. I use dummy variables that indicate those who have worked in manual labor but never the construction industry, those that have worked in manual labor within the construction industry, and those that have never worked in a manual labor occupation. This will serve as the independent variable for the first model of each series of regressions. In order to best discern differences, the reference category will be manual laborers never working in construction.

In order to best highlight masculinity, specifically in its association with men, all of the regressions use only male respondents. Additional control variables include other known determinants of health. These include race, class, a race/class interaction (white working-class), and the number of work-related illnesses and injuries ever reported. Because all respondents participating in the health supplement did so at age 40, age is not used as a control variable.

Race is coded as white or non-white. Early regressions showed no significant differences between Blacks and Hispanics on health outcomes. In addition, because construction is made up primarily of white working-class men, I wish to fully explore the intersection of these three categories. When used in regressions, non-white serves as the reference category.

While a number of measurements exist for class, I chose to focus on income in the year that the 40+ Supplement was administered. This has strengths and weaknesses. Income is the best proxy for class available in this data set. However, it is important to note that additional factors, including wealth, income over time, and social characteristics, would offer a more nuanced measure of class. However, given its strong relationship with health, income should operate as an acceptable proxy. Using actual dollars in annual income, I chose to mark working-class at the fortieth percentile (Beeghley 2008). The final class dummy variable denotes working-class or non-working class, with the latter defined as the reference category. I additionally use a

race/class interaction independent variable in each set of regressions. This dummy variable was constructed to look at the intersection between being white and being working-class.

Finally, I include an independent variable based on the total number of work-related injuries and illnesses ever reported by respondents. Between 1988 and 2000 (with the exception of 1991), the NLSY79 gathered information on work-related illnesses and injuries. These questions focus on the most recent work-related injury or illness and the most severe work-related injury or illness (in cases where the respondent suffered from more than one illness or injury since the last interview date). This means that each respondent could report up to two injuries per year. These were added together for this variable, and used to see if occupation had a health effect separate from work-related injuries and illnesses.

In the regressions, each control variable is added to a new model, for a total of five models in each regression. Model 1 includes only occupational typology; model 2 adds race; model 3 adds class; model 4 adds the race/class interaction; and model 5 adds work-related illnesses and injuries. I use the same basic design for the single binary logistic regression, with the obvious exception of using total number of work-related illnesses and injuries (which becomes the dependent variable in the binary logistic regression). In that instance there are only four models (occupational typology, race, class, and race/class interaction, in that order).

Qualitative Methods

Sample

Of the six construction general contractors contacted via email, three responded positively. Eight of the twelve interviews came from these three sites. The other four were interviews with construction workers who, through word of mouth, had heard about the project. In order to get an idea of how laborers' experiences of health might differ from those in high-level management

positions, three of my interviews were with management personnel within general contracting companies. Most of the participants were at least middle aged, they were all men, and, with the exception of one Hispanic worker, were all white. Many of these workers were what I would call the elite among construction workers. Most of them worked for regional sub-contracting companies, and earned a sizeable income (between \$50,000 and \$70,000 annually) compared to the \$43,784 industry mean reported by the Bureau of Labor Statistics (2009). This was not the case for all of the participants with four participants reporting much lower incomes, and less stable work availability, including two who reported being currently-employed-but-not-working. This means that these two respondents had not been formally laid off or fired, and were still technically employed by a sub-contractor, but the sub-contractor had not recently had any work to assign them. Table 1 outlines some of the general characteristics of the sample, including the pseudonyms assigned to them.

Table 1.1. *Selected Sample Characteristics*

Name	Age	Most Recent Occupational Title	Years in Industry	Type of worker
Clinton	49	Senior Project Manager	27	Management
Jessie	60	Superintendent	41	Supervisory Personnel/Laborer
Darren	57	Senior Superintendent	30+	Management
Cody	38	Concrete Finishing Supervisor	22	Supervisory Personnel/Laborer
Ted	38	Plumber	17	Laborer
Hugh	53	Plumber	34	Laborer
Jamie	61	Superintendent	41	Supervisory Personnel/Laborer
Javier	29	Structural Steel Supervisor	12	Supervisory Personnel/Laborer
Kurt	44	Project Executive	28	Management
Allen	55	Concrete Finisher/ Owner	40	Supervisory Personnel/Laborer
Clayton	48	Project Superintendent	18	Supervisory Personnel/Laborer
John	63	Project Superintendent	35+	Supervisory Personnel/Laborer

Qualitative Data

In addition to complete observation notes, visual data, and transcribed interviews, I kept notes of my reflections, experiences, and thoughts during the research process, as well as indepth research memos. These notes and memos were intended to ensure my own reflexivity, increase trustworthiness, and aid in the coding process (Creswell 2007). These notes and memos also guided subsequent interviews and observations. Thus, analysis occurred throughout the research process. While themes were allowed to emerge from the data naturally, I also created some pre-formulated codes related to the research questions (such as health, disability, class, masculinity, and so forth) (Creswell 2007).

More detailed information about specific analyses is included with each chapter.

Basically, formal analysis was performed after the completion of data collection. During this phase, I coded all data in multiple stages. These stages included a close reading of the material during which all data were coded completely (Creswell 2007). Another stage of coding focused on searching for larger themes, evaluating relationships, and looking for locations of convergence and divergence within the data. This stage served to repackage and aggregate the data (Miles & Huberman 1994). A third stage of coding included drawing conclusions and synthesizing data into a single explanatory framework (Miles & Huberman 1994). Interpretation occurred concurrently along with analysis.

Epistemological Considerations

Given that the study population for this project occupies a position within the social structure that offers some privilege to them, as men (often white men); but also subordinates their masculinity (due to their position within the labor and economic systems), I use a feminist, transformative paradigm. A transformative paradigm focuses on "the dynamics of power and privilege and how they can be challenged" (Mertens 2009). It applies to those who may experience discrimination and oppression on any basis, and is used to study "power structures that perpetuate social inequities" (Mertens 2009). It can be used to not only look at those in marginalized positions, but also to interrogate spaces of power and privilege (Mertens 2009).

Gender is one of the primary organizing principles in society. Feminist epistemology "investigates the influence of socially constructed conceptions and norms of gender and gender-specific interests and experiences on the production of knowledge" (Anderson 1995). Much of the research stemming from a feminist epistemology has focused attention on the "situated knowledge" (Haraway 1988) or "standpoint" (Hartsock 1997) of women, bringing to light the ways in which an unequal gender system has subjugated the knowledge of women.

In response to criticisms of the idea of a single, monolithic "womanhood" from which this feminist standpoint emanates, some feminist theorists have extended these ideas to include intersectional inequalities (Crenshaw 1989). These are the locations where separate processes of inequality come together (i.e. race and class; race and gender; race, class and gender). While the masculine has dominated the feminine, the hegemonic masculine has dominated subordinated masculinities (Connell & Messerschmidt 2005). A feminist lens is necessary to best evaluate and theorize these power relations among multiple masculinities. According to Kegan Gardiner (2002), "feminism can produce only partial explanations of society if it does not understand how men are shaped by masculinity (p. 9)." This project is formulated on the idea that those men enacting a subordinated masculinity produce a particular "situated knowledge."

It is, perhaps, most important to utilize feminist epistemology and methodology to build theoretical thought in areas that have been male-dominated throughout history. The fields of health and work have largely been masculinist. In recent years, feminist research has shed light on the gendered nature of institutions and organizations (Acker 2006). The organization of work (Acker 2006) and health care (Zimmerman & Hill 2006) have both been interrogated as gendered entities.

The field of medicine has proven to be particularly well-insulated from alternative and feminist research approaches (Forthofer 2003). Foucault discussed at length the relationship between power and knowledge (Foucault 1989). The biological sciences (in general) and the medical field (more specifically) exercise a great deal of power in knowledge creation. This knowledge power is largely masculinist, remaining primarily supportive of positivist notions of truth (Pope & Mays 2006). These facts, taken together, increase the importance of transformative feminist health research using novel methodological approaches.

In recent years, the field of health care has become increasingly cognizant of the social aspects of health. Over the last decade or so, the call for social research in the health sciences has become increasingly prevalent. The World Health Organization, Centers for Disease Control, and National Institutes of Health have all drawn attention to social determinants of health and instituted research goals that incorporate social health research. Possibly in response to "the complexity of studying individual health and disease processes in the context of social systems, multilevel mixed methods research is steadily gaining in popularity" in health research (Forthofer 2003). The proposed study builds on these needs and trends by offering a transformative feminist research design using multiple methods to evaluate the relationship between social structure and health for construction workers.

As a feminist researcher, it is necessary to speak for a moment about reflexivity, and my own placement within this research project. Married to a career construction worker, I have witnessed firsthand some of the concrete effects of this type of labor (on bodies and wallets). I have also been privy to conversations and interactions between construction workers during which time they discuss their views of their positions within the larger social structure. It has been my experience that these workers are very aware of their subordination within the larger structure, as well as their precariousness within the economic system. I have also been witness to discussions about anger, vulnerability, and invisibility. Over time, I have become more aware of the ways in which the bodies of workers are changed by the nature of the work – on the one hand creating hearty constitutions, strong hands, and lean musculature, and on the other physical injuries that do not necessarily heal completely, the limp, the bowed back. I have also been consistently impressed by the ways in which the world is transformed through the use of these men's bodies, and the pride with which they view this transformation. I cannot say that I am not

personally involved in this research topic. Instead, I can say that I am absolutely invested in the process that might highlight the good, the bad, and the ugly in the lives of construction workers in the hopes that this research may lead to change.

Feminist standpoint theorists have discussed at great length the relevance and importance of the standpoints of those subjugated within the social system, specifically the gender system (Hartsock 1997). Much of the work of feminist standpoint theorists has focused on the knowledge of women in general (Hartsock 1997). Other feminist standpoint theorists have identified that other intersecting inequalities (like race) impact standpoint (Hill Collins 2000). However, the standpoints of subordinated men have gone largely unexamined from a feminist perspective. I propose to conduct this research with the understanding that the experiences of men who are subordinated within the gender system also provide a particular standpoint. Drawing from the work of Haraway (1988), this study is founded on the idea that "situated knowledge," as an embodied knowledge, is a localized knowledge of the world, and that those in subjugated positions have an ability to see a particular view of the power structure in which they are situated. One important use of the feminist lens in research is the ability to interrogate positions of privilege (Kegan Gardiner 2002). Using a feminist lens allows me to critically evaluate the ways in which privilege and subordination play together in the lives of manual laborers in the construction industry.

Dissemination

In order to make the findings of this study relevant to the multiple disciplines implicated, I seek to disseminate the results broadly. The non-standard dissertation structure increases opportunities for theoretical and empirical pre-dissertation publications. The wide applicability of these findings to a diverse audience also increases publication opportunities. Potential venues

include academic journals associated with sociology, work, health, gender and disability as well as trade journals in the occupational health, rehabilitation, and construction industries. Each of the three chapters contained within the dissertation was written with specific journals and audiences in mind, which are outlined in the following section that introduces each chapter.

Introduction to the Chapters

This study takes advantage of a non-traditional dissertation structure in which the results of the research are reported in three ready-for-publication chapters. Given the breadth of the applicability of this research, I have chosen to report these findings so that they are tailored to three very different audiences. Each chapter focuses on one of the overarching research questions associated with this project, and each has its own, more detailed research questions. In this section, I introduce all three chapters individually, their research aims, and their intended audience/journal.

"The Health of Construction Workers: Gender, Race, Class, and Occupational Determinants"

In this chapter, I explore the relationship among race, class, gender, and occupation and the health of construction workers. Using both quantitative data from the NLSY79 and qualitative data from interviews with twelve construction workers, I focus my attention on two, more specific research questions. First, I ask whether or not there is a relationship between occupation, in this case construction, and health for men. Second, I ask how race, class, and gender affect health outcomes for white working-class men in the construction industry. In order to tease out the answers to these two questions, I compare those who have worked in manual labor occupations within the construction industry to manual laborers outside of construction quantitatively, and to non-manual laborers within the construction industry qualitatively. This chapter is intended for submission to *The International Journal of Men's Health*.

"Wear and Tear: The Social Production of Disablement in Construction Workers"

This chapter explores how working-class masculinity and occupation affect patterns of disablement among construction workers, and how workers experience these processes. Based on qualitative data from the twelve interviews, this study asks three related questions. 1) How do the experiences and narratives of construction workers illustrate disablement as a process? 2) How are class and gender implicated in the production of occupational disablement?

Specifically, how is working-class masculinity implicated in the production of occupational disablement for workers in the construction industry? 3) How do workers in the construction industry experience and define disability? How do these definitions and experiences relate to bio-medical, social, phenomenological, or administrative definitions? This chapter will be submitted to the journal *Disability Studies Quarterly*.

"Corporeal Power: Theorizing the Body in the Social Structure"

The final chapter in this dissertation is a theoretical exploration of the body within the social structure. In this chapter, I offer a theoretical view of the body as a social process, tied directly to the larger social structure and its system of complex inequalities through the processes of material and symbolic production and consumption. In so doing, I bring together the interdisciplinary strengths of scholarship in sociology and body studies, on the one hand, and more recent scholarship on intersectional inequalities, on the other. This chapter is intended to answer the third question associated with this research project: How do social inequalities shape bodies? This chapter will be submitted to the journal *Body and Society*.

CHAPTER 2

The Health of Construction Workers:

Gender, Race, Class, and Occupational Determinants

Abstract: This multiple methods study looks at relationships among gender, race, and class, as

they influence the occupational health of male construction workers. Using data from the

National Longitudinal Study of Youth 1979 (NLSY79) and from in-depth interviews with twelve

construction workers, I focus on how these areas of inequality operate within the context of

occupation in shaping health outcomes for male construction workers. First, race, class, and

gender matter to men's occupational health, though they operate differently from one another.

Second, these findings suggest methodological implications for future research on men's health,

including the need for a clearer conceptualization of how men understand their health. Finally,

these findings have policy implications, especially in the areas of health care accessibility and

workplace safety.

Keywords: Social determinants of health; Occupational health; Construction workers; Health research;

Masculinity and health

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The Health of Construction Workers: Gender, Race, Class, and Occupational Determinants

Evidence for social influences on health is extensive (for an overview, see Centers for Disease Control and Prevention, 2011). However, what is lacking is an understanding of the specific mechanisms through which these health outcomes are produced. The prevalence of systematic health disparities indicates that different social groups are enmeshed in different processes of health and disablement. In this chapter, I explore the complex relationships among gender, race, and class, and occupational health and disablement by focusing on a prototypical group: male manual laborers in the construction industry. In order to more fully illuminate these relationships, I engage in secondary analysis of quantitative data as well as an examination of themes that emerged from primary qualitative data. As suggested by health disparities research, I use various general health measures and worker narratives to explore the relationship among occupation, class, race, and gender and health. More specifically, I focus my attention on white, working-class men in the construction industry.

Gender, Race, Class, Occupation and Health

Relative to women, men suffer from more severe chronic conditions, have a lower life expectancy, and have higher death rates associated with the most prevalent causes of death in the U.S. (Courtenay, 2000). Such health disparities between men and women have been explored elsewhere (for one such review, see Read and Gorman, 2010). Scholars have conducted less research on health disparities among men, especially on social determinants of health inequalities. Some studies have shown that certain groups of men have particular health vulnerabilities. For instance, those with low socio-economic status (SES), including those with less education, and minority men are especially vulnerable. Women in these groups also exhibit negative health outcomes; however, the marked difference between men in these groups and

similar women seems to implicate aspects of masculinity in these health disparities. In other words, social determinants of health like class and race may operate differently for men's health than for women's (Williams, 2003). The intersection of masculinity with race and class creates multiple masculinities, which may mean that different social groups of men approach their bodies, health, and health care in varying ways. In addition, it may be that masculinity exerts a negative effect on health and femininity serves a protective function (or at least a less negative consequence), depending on context.

In their review of class and race health disparities, Williams & Collins (1995) assert that class, whether measured by income, wealth, education, occupational characteristics, or some combination of these, has proven one of the strongest predictors of health outcomes. They find that those of lower socio-economic status exhibit significantly poorer health and increased mortality rates, and this gap has consistently increased over time. However, SES does not operate the same for all groups of people. Other social inequalities, like those based on gender and race, intersect with class, shaping health in particular ways. For instance, health outcomes for white, black, and Hispanic working-class men differ (Williams & Collins, 1995), making it necessary to take these intersectional inequalities into consideration in any study of health disparities.

Working-class masculinity is a subordinated masculinity (Connell, 2005b). However, masculinities that are subordinated within the larger social structure exert hegemonic status within their own cultural group (Baron, 2006). The ideals and bodily practices of working class masculinity differ from other classed masculinities (Morgan, 2005), in that working-class masculinity emphasizes physical labor, provisioning, protection, risk-taking, and sexual prowess (Baron, 2006). Some of these characteristics of working-class masculinity can influence physical capital, and may leave the working-class male body vulnerable to illness and injury

(Williams, 2003). In the case of physical laborers, "vulnerability comes from the very situation that allows them to define masculinity through labor. This emphasis reflects an economic reality, working men's bodily capacities are their economic asset. But this asset changes as the regime of profit uses up the workers' bodies" (Connell 2005b, p. 55). This "using up" may result in health problems and disablement.

Williams and Collins (1995) review research on racial and economic health disparities and show that whites in the United States tend to exhibit better health than racial minorities. One of the most significant disparities exists between whites and Blacks, with Blacks exhibiting poorer health on most (if not all) health indicators, including age-adjusted mortality rates. According to Williams and Collins (1995), research on Hispanic health in the U.S. has led to mixed results. Hispanic health seems to vary according to geographic location of birth, and type of health outcome being measured. Immigration status and citizenship also play an important role in occupational health. For instance, workers born outside the United States have been found to have a work-related fatality rate twenty percent higher than that for all workers (American Public Health Association, 2005). Citizenship status is also a major factor in the occupational health of immigrant workers. Undocumented workers, while protected by health and safety laws, may be less likely to report illnesses and injuries, due to a fear of deportation. They are also more likely to hold particularly precarious positions within hazardous occupations, like day laborers in the construction industry, which places them at greater risk of receiving insufficient training or inadequate safety precautions. According to the American Public Health Association (2005), attempts to provide information and services to immigrant workers have been rendered ineffective by sting operations perpetrated by the Bureau of Immigration and Customs Enforcement of the Department of Homeland Security, which have mimicked programs provided by public health organizations with the expressed purpose of capturing and deporting undocumented workers. In addition to other areas of inequality, such as class and gender, institutionalized racism evidenced in policy, historic events, and residential and occupational segregation may also have a significant relationship with racial health disparities (Williams & Collins, 1995).

While not a system of inequality in itself, occupation has been tied to health disparities, especially particular aspects of occupation including inadequate or precarious employment, hazardous work, and occupational stress (Williams, 2003). Because paid work is intimately tied to the construction and maintenance of masculinity, gender may shape occupational health such that men and women may experience different outcomes. For example, gendered coping responses to work-related stress have been found to have an impact on related health outcomes for men and women in similar occupations. Williams (2003) discusses gendered coping responses to work related stress, including women's tendency to utilize support networks more effectively than men. In addition, Williams maintains, women's mental health outcomes associated with stress tend to be related to the internalization of stress, resulting in health issues like depression and anxiety, while men externalize stress, resulting in health issues including drug and alcohol abuse and anti-social behavior. Occupational health statistics show that occupational health disparities exhibit some of the same patterns as more general health differences, varying based on gender, race, and class (Souza, Steege, & Baron, 2010).

Construction workers occupy an unusual position within the occupational and social structure. Construction, a male-dominated industry, is a site of the formation, maintenance, and (at times) destruction of masculinity. With its almost exclusively male workforce, grueling physical labor, and historic association with organized labor, it is a site specifically oriented to

working-class masculinity. The work itself is dangerous, leaving workers vulnerable to physical injury, illness, and death. Additionally, the instability of the work conditions -- vulnerable at once to economic and social forces as well as the forces of nature-- make it especially important to the study of particular groups within the larger economic structure. Precarious or unstable work conditions have been linked to negative health outcomes (American Public Health Association, 2005). These characteristics of the construction industry make it a fitting location to explore the ties among occupation, masculinity, and men's health.

This exploration leads me to two research questions. First, I ask whether or not there is a relationship between manual labor in construction and health outcomes for men. Second, I ask how race, class, and gender affect health outcomes for white working-class men in the construction industry. In order to tease out the answers to these two questions, I compare those who have worked in manual labor occupations within the construction industry to manual laborers outside of construction quantitatively, and to non-manual laborers within the construction industry qualitatively. I address these questions in a number of ways. Using quantitative analysis of data from the Bureau of Labor Statistics National Longitudinal Study of Youth 1979 (NLSY79), I look at these relationships among a nationally representative sample of men. In addition, I use data gathered from in-depth interviews with twelve construction workers in the Southeastern United States.

Below, I describe the data, methods, analysis and findings from the quantitative portion of the study. Next, I turn to the qualitative findings, first describing how these data were collected and analyzed. Finally, I offer a brief discussion of the implications of both sets of findings.

Quantitative Methods and Analysis

Quantitative analysis of data from a nationally representative sample allows for the documentation of some general patterns and relationships, while qualitative analysis allows for depth and specificity that are not available from larger existing data sets. Employing multiple methods allows each type of data to minimize the weaknesses of the other, ultimately strengthening the findings (Creswell & Clark, 2007). My quantitative analysis consists of OLS and binary logistic regressions of the Bureau of Labor Statistics' (BLS) National Longitudinal Study of Youth 1979 (NLSY79), using various health measures as the dependent variables. These regressions allow me to discern the relative relationships of different inequality measures to health outcomes (Stolzenberg, 2009). In addition, regressions allow for the creation of interaction variables that may approximate the effects of intersectional inequalities (Jaccard & Dodge, 2009).

The NLSY79 is a longitudinal study using a representative sample (in 1979) of non-institutionalized youth between the ages of fourteen and twenty-two, and a sample of 6,111 core participants. The retention rate has remained between eighty and ninety percent. Interviews occurred annually between 1979 and 1994; after that, a biennial schedule has been followed. I focus on measures regarding work, work-related illnesses and injuries, and demographic measures from the regular annual/biennial interviews. In addition, I also use health measures derived from the 40+ Health Supplement, administered as respondents turned forty.

Sample

After splitting the data to include only men, a total of 4,169 cases remain. By the year that the 40+ Health Supplement was administered, 38.8% (1,619) had worked as a manual laborer within the construction industry, 54.1% (2,255) had worked manual labor outside of the construction

industry, and 7.1% (295) had never worked any manual labor. Racial/ethnic categories include 49.5% (2,065) white participants and 50.5% (2,104) non-white participants. Of the non-white participants, 30.7% (1,280) report their race/ethnicity as Black and 19.8% (824) as Hispanic. Class designations include 42.8% (1,515) working-class respondents and 57.2% (2,027) non-working class respondents. Looking at groups defined by intersections, the sample consists of 563 respondents designated as white working-class; 952 respondents are non-white working class; 2,667 are white non-working class; and 742 are non-white non-working class.

Table 2.1. *Quantitative Sample Characteristics*

Summer Sample Character issues			
Characteristic	N	%	
Adult Occupational Type	4169	100	
Manual Construction	1296	31.1	
Manual Labor No Construction	2085	50.0	
No Manual Labor	788	18.9	
Race	4169	100	
White	2065	49.5	
Non-white	2104	50.5	
Black	1280	30.7	
Hispanic	824	19.8	
Class	3542	100	
Working class	1342	37.9	
Non-Working class	2200	62.1	
Race-Class Intersections	3542	100	
White working class	476	13.4	
White non-working class	1372	38.7	
Non-white working class	866	24.4	
Non-white non-working class	828	23.3	

Measures

Dependent variables: health measures

I use the following health measures, taken from the 40+ Health Supplement, as dependent variables for respondents at the age of forty: self-rated health, the number of organic conditions,

and the number of physical health problems.

Self-rated health is based on a single question included in the 40+ Health Supplement.

Respondents were asked to rate their health between Poor (scored as 1) and Excellent (scored as 5).

In the 40+ Health Supplement, interviewers ask each respondent if they suffer from any conditions enumerated on a fairly exhaustive list of forty-four individual health issues. In order to differentiate between health issues that might be more specifically related to physical labor, I separated the contents of the list into two distinct categories: physical conditions (12 total conditions), and organic conditions (32 total conditions). Physical conditions include those that are more involved with musculoskeletal conditions (i.e. arthritis, pain, back problems, and joint problems). Organic conditions are more related to internal bodily processes (i.e. heart problems, diabetes, chemical imbalances). For each measure, I added the total number of each category of condition reported at age forty by each respondent.

Independent variables

I split the sample to include only men, allowing me to focus specifically on masculinity as it occurs in working-class men, and men's health. Using occupational descriptions in the Dictionary of Occupational Titles (DOT) (U.S. Dept. of Labor, 1991), and occupational data from the NLSY79, I created a variable that measured whether or not, at the time of the administration of the 40+ Health Supplement, a respondent had: ever worked manual labor but never in the construction industry; ever worked manual labor in the construction industry; or never worked manual labor at all. Respondents' race was measured as a dummy variable; respondents were designated as either white or non-white, with the non-white racial category operating as the reference category. In order to measure class, I used the respondent's reported

income the year that the 40+ Health Supplement was administered. According to Beeghley (2008), between forty and forty-six percent of Americans qualify as working class, based on occupational characteristics like blue collar work, high levels of routinization, and low economic security. He also suggested that a man who makes approximately \$40,000 was a likely example. Based on these descriptions, I chose to categorize men with annual salaries of \$40,000 or less, in the year that they completed the 40+ health supplement, as working class. In addition, I created an interaction variable for race and class. Specifically, I look at the intersection of being white and working-class. From the main NLSY79 data, I created a variable that represented the total number of work-related illnesses and injuries reported through the year that the 40+ Supplement was administered.

Results

I used OLS regressions for each of the three health measures. The first model uses only occupational typologies as independent variables, with manual labor not in the construction industry operating as the reference category. In each of the subsequent three models, I add one variable cluster in the following order: race (with non-white as the reference category), class (with non-working class as the reference), working-class white interaction, and the total number of work-related illnesses and injuries. In the interest of brevity, I have included only the final model for each health measure in Table 1.

Table 2.2.

Final Regression Model for Self-rated Health, Organic Conditions, and Physical Conditions

Self-rated Health Organic Conditions Physical Conditions

	Self-rated Health	Organic Conditions	Physical Conditions
Constant	3.894	.444	.399
Manual Construction	095**	041	.084*
No Manual Labor	.085	.088	.088
White	.100*	.152**	.141**
Working Class	307***^	.219***	.200***
Working Class White	133*	.096	.032
Total Work Inj/Ill	067***	.130***^	.182***^
R2 (Adj)	.053	.031	.054
N	3541	3542	3537

^{*} $p \le .05$; ** $p \le .01$; *** $p \le .00$; ^strongest predictor in model

Given the importance of work-related illnesses and injuries to all three health outcomes, I ran a binary logistic regression to ascertain whether or not particular groups of men were more likely to have ever reported a work-related illness or injury. Following similar models as listed above, I ran a binary logistic regression to look for any significant differences in likelihood of experiencing work-related injuries and illnesses when compared to other types of occupations. Findings from this analysis can be found in Table 2.

Table 2.3.

Binary Logistic Regression on Ever Reporting a Work-Related Injury or Illness

	В	SE	Exp(B)
Constant	631	.074	.532
Manual Construct.	.503	.194	1.654***
No Manual Labor	-1.269	.098	.281***
White	042	.105	.958
Working Class	127	.147	.881
Working Class White	.726	.082	2.066***
Nagelkerke R2	.070		
N	3542		

^{*} $p \le .05$; ** $p \le .01$; *** $p \le .00$;

Discussion

Occupation, Race, Class, Masculinity, and Health Measures

One important finding in this analysis is that, for men, occupation matters in mid-life

health. Ever working in manual labor within the construction industry was associated with lower self-rated health and more physical conditions, compared to other manual labor occupations.

Never working in manual labor did not differ significantly from working in non-construction manual labor occupations on these health measures. However, in the consideration of organic conditions, working manual labor within the construction industry was not statistically different from other manual labor occupations.

The total number of reported work-place injuries and illnesses in the models showed a significant relationship to all of the health measures. This indicates that, in addition to occupation, workplace safety also matters to men's health at middle age, and has a separate effect. By looking at workplace injuries and illnesses in addition to occupation, we can see that it is not only the hazards associated with construction at issue. If that were the case, the significance of occupation would have been explained away by the addition of injuries and illnesses to the model. In the case of the number of reported physical conditions, the number of illnesses and injuries does explain some of the significance associated with occupation in previous models, but occupation remains significant. This suggests that there are health issues related to working in construction, which might include the social relationships associated with the occupation.

Being working-class was consistently associated with lower health at middle age. In fact, for self-rated health, class was the strongest predictor in the models. Race showed some mixed results. While being white was associated with significantly higher self-rated health, it was also associated with more reports of physical and organic conditions. There may be a number of reasons for this seeming discrepancy. Whites may have more access to important health-care resources that provide not only options for better health overall, but also important diagnostic

tools. Looking at the interaction effect of being white and being working-class yielded some insight into intersectional inequalities for men. This interaction variable was only significant for self-rated health. In this instance, being working-class and white exerted an additional negative effect separate from the negative effect of class and the positive effect of being white.

The number of reported work-related injuries and illnesses was linked statistically to negative health outcomes at middle age for all of the dependent variables. In the case of physical and organic conditions, this variable exhibited the strongest relationship in the regression model. This would seem to indicate that working in hazardous conditions has long-term health effects, potentially separate from the acute dangers most readily associated with them. It is also interesting to note that injuries and illnesses operate in addition to separate effects of manual construction in the cases of self-rated health and total physical conditions. Those who have worked in a manual occupation within the construction industry appear to experience an additional penalty if they have work-related illnesses and injuries over the years.

Workplace Injuries and Illnesses

Binary logistic regressions show that particular groups of men have heightened risk of reporting a work-related illness or injury. In the final model, even after considering race, class, and a race/class interaction, men working in manual occupations within the construction industry are more than 1.5 times as likely as those working manual labor in other industries to ever report having a work-related injury or illness. By contrast, men who have never worked in any manual labor occupation are .28 times as likely to report one throughout their career. A working-class white interaction shows that those men have an additional 200% likelihood of reporting a work-related illness or injury. This means that working-class white men who perform manual labor within the construction industry are much more likely to, at some point, report a work-related

injury or illness than other men in the same occupation. This may indicate a tension between working-class risk and white privilege. As previous studies have shown (Williams 2003), working-class individuals may be more likely to incur a work-related injury or illness, but whites may have more job security, allowing them to *report* these injuries and illnesses.

These findings suggest first of all that there are multiple health processes at work. In addition, they point to different mechanisms within these various health processes through which inequalities operate. In addition, they suggest that, in the case of some health outcomes, occupation matters in multiple ways. In the qualitative phase, I focused my attention on teasing out more depth to these findings, focusing on how areas of inequality in the context of work shape the health of construction workers.

Qualitative Methods and Analysis

The qualitative analysis is based on data I gathered through interviews with twelve construction workers and field notes taken from numerous visits to construction sites over a fourmonth period. Semi-structured interviews with individuals working within the construction industry make up the bulk of the qualitative data; they focused on the nature of the work, industry trends, health of the workers, work relationships, and workplace safety. All interviews were audio-recorded, and later transcribed verbatim. Coding of qualitative data was iterative (Boeije, 2010). The first round of coding included complete coding of closely read verbatim transcripts (Creswell, 2007). The second set of codes were chosen based on specific themes in which I was interested that related specifically to research questions (Boeije, 2010). A third set of codes was created by focusing on emergent themes not necessarily related to my research questions (Miles & Gubrium, 1994).

Sample

I conducted in-depth interviews with twelve construction workers. I included both laborers and management personnel in these interviews. Not only did this aid in comparisons between different types of construction workers, it also reflects the sometimes blurry boundaries between management and labor within the industry, which requires some introduction. There are effectively two separate managerial hierarchies within the construction industry, one associated with general contract management, and one with the skilled trades themselves. General contractors have managerial responsibility over entire projects, including various trade subcontractors. Those working in general contracting management rarely, if ever, participate in actual labor on construction sites, though many of them have some background in the skilled trades. Skilled labor sub-contractors have their own occupational hierarchy, with various supervisory personnel who typically still perform at least some parts of construction labor, though in some cases this can be substantially less laborious or more highly specialized than work performed by non-supervisory laborers. In addition, supervisory personnel tend to align themselves with workers rather than general management. For the purposes of differentiation, references to management in this chapter will refer specifically to those in general contract management. Insofar as they align themselves with workers (or vice versa), I discuss supervisory personnel within sub-contracting companies along with other worker respondents. However, in cases where the experiences or narratives of supervisory personnel diverge from those of laborers, I refer to them as supervisory personnel (as opposed to management).

Respondents ranged in age from twenty-nine to sixty-one, with an average age of fortynine and reported being in the construction industry between twelve and forty-five years. One participant identified as Hispanic, the rest as white. Table 3 summarizes select characteristics of the sample, including the pseudonyms assigned to each participant.

Table 2.4. *Selected Participant Characteristics*

Name	Age	Most Recent Occupational Title	Years in Industry	Type of worker
Clinton	49	Senior Project Manager	27	Management
Jessie	60	Superintendent	41	Supervisory Personnel/Laborer
Darren	57	Senior Superintendent	30+	Management
Cody	38	Concrete Finishing Supervisor	22	Supervisory Personnel/Laborer
Ted	38	Plumber	17	Laborer
Hugh	53	Plumber	34	Laborer
Jamie	61	Superintendent	41	Supervisory Personnel/Laborer
Javier	29	Structural Steel Supervisor	12	Supervisory Personnel/Laborer
Kurt	44	Project Executive	28	Management Management
Allen	55	Concrete Finisher/ Owner	40	Supervisory Personnel/Laborer
Clayton	48	Project Superintendent	18	Supervisory Personnel/Laborer
John	63	Project Superintendent	35+	Supervisory Personnel/Laborer

Findings

Health

Participants were asked how they would rate their own health. All of the participants, with the exception of one, described their overall health in positive terms. These terms included 'fine,' 'good,' and 'great.' Darren (age 57), the sole participant who reported health problems, said that his health was good 'now', after surviving a bout with cancer two years prior to the interview. Two respondents reported taking medication for high cholesterol and blood pressure, but felt it was under control and no longer an issue. In fact several participants specifically described their

own health as superior to other men their age. When asked to compare his own health to other men his age, Allen replied, "I think I'm healthier than any of them. Men-wise, my age. And probably several years up and back." When asked the same question, Clayton, despite having reported severe chronic pain in numerous areas of his body, said, "I'm in pretty good shape." When asked about health conditions, most of these respondents reported that they had no health issues.

All nine of the respondents who reported physical conditions reported these separately from the question about their health. They attributed these conditions to age, work, or a combination of the two. Physical conditions like pain, arthritis, and bursitis were illustrative of the types of conditions they reported. These painful conditions were associated with multiple body parts (including legs, knees, hips, shoulders, back, and elbows) for most of the respondents. The following quotes illustrate the ways that these respondents talked about their physical conditions. 'I have aches and pains all the time (Hugh).' 'I got Arthritis, bursitis, all your itis'es (Jamie).' 'Knee, hip, elbows, back, joint pain you know. Arthritis setting in (Clayton).'

Worker's clear differentiation between obvious painful conditions and positive self-rated health is one important finding of this study. Participants often explicitly stated clear boundaries between what I have referred to as organic and physical conditions. Ted stated, "My knees kill me. My knees, my legs and my back is the biggest thing. But as far as health-wise, I went and had my heart checked and everything seemed to be fine." In this quote he utilizes a medical definition of health, involving only organic conditions, and uses a practitioner's to legitimate it despite a stark contrast with the respondent's own experience of his body. This quote, and the discrepancies noted above, illustrates the ways that all of the participants described health as something separate from their physical complaints, such as pain from arthritis.

Workers overwhelmingly attributed their physical conditions to some combination of work and age. Several of the participants, when describing physical complaints, specifically mentioned a relationship between those conditions and advancing age in addition to physical labor. For example: 'That comes with age (Jamie),'and 'Just getting older (Allen)' were indicative of this understanding of physical breakdown as a characteristic of age. All of the respondents also reported that their work was a factor in their health. They noted particular aspects of their work like 'climbing ladders all day,' 'being on your knees a lot,' and 'heavy lifting,' as being part of this physical breakdown. However, they did not view their work as only having a negative impact on their health. In fact, by separating these different types of health, workers were able to narrate their jobs as beneficial to their bodies, leading to good heart health, increased strength and stamina, and low blood pressure. These stories were related with a sense of accomplishment and pride.

These understandings of the relationship among age, work, and health allowed workers to narrate their seeming lack of more organically-based health conditions as a personal accomplishment (through their hard work) and physical conditions as out of their control (because age was also implicated). Quotes like 'I'm a hard worker, I can outdo any of those other guys (Cody),' and 'It's just get older (Allen),' illustrate the ways that respondents took credit for or denied control of particular types of health issues. The participants all compartmentalized their health into two separate spheres: organic conditions and physical conditions, though they did not consider physical conditions to be a part of their overall health. Narrating organic conditions as due to their hard work, and wear and tear as being explained through a combination of aging and the nature of the job allowed them to take credit for what they considered to be exemplary health, while relegating their physical pain to a position that was ultimately out of their control.

Findings about the use of healthcare services surprised me. Some research has suggested that men fail to adequately utilize health services, ultimately leading to some of the health disparities between men and women (Courtenay 2000). In interviews, men indicated that they did in fact use health services, but there was a clear difference in use of health services between participants who felt they had adequate health insurance and those who did not feel they had adequate coverage. Based on these interviews, employer-provided health insurance is an important issue for these workers. While it can be integral to their well-being, it is not always sufficient. It can be prohibitively expensive, offer insufficient coverage, or be non-existent. Two participants (Cody and Allen) reported that they had no healthcare coverage, and Clayton reported that his insurance was inadequate. All three of these respondents reported only seeing a doctor when absolutely necessary. They did not get regular checkups or have a family physician. All of the other participants reported that they used their insurance for regular checkups every six to twelve months. Some of these respondents had conditions like high blood pressure or high cholesterol that were closely managed by doctors. Availability of and access to these types of services were apparently associated with men using them. However, those who did not have this type of access fell back on narratives that supported ideals of working-class masculinity, reflecting themes found in other research on under-utilization of these services by men (Courtenay, 2000). Cody said, "I ain't going to pad these rich guys' [doctors] pockets just to go find out there ain't nothing wrong. If it ain't broke, you know." It may be that lack of access, which is associated with a lower level of provisioning for one's self and family, creates a need to narrate health care practices in such a way to support ideals of masculinity, such as independence and self-reliance. Thus, masculine ideals of independence and self-reliance may drive underutilization.

Occupational Health and Safety and Men's Health.

Interviewees in this project frequently talked about work-related accidents, injuries, illnesses, and fatalities. They described their work in the construction industry as dangerous and requiring constant attention to safety issues. However, for the most part, workers described their workplace as being as safe as construction can be. Many respondents associated youthful working-class masculinity practices with hazardous behavior on the job, while older workers were primarily considered to be safe workers. Young workers were described as showing off or being competitive when they participated in risky on-the-job behaviors. Clinton had the following to say about young workers, "And like with all young guys, 'I can do it better, faster than your way... get outta my way old man'." Allen described it this way, "Just being macho, and goofing off. And there is that on jobs. Goofing off and playing and stuff when they're still kids... later they regret it." Kurt described his own behavior as a young builder, "I've actually gotten hurt for that reason. I agree that was definitely a problem." Clinton also described an example of youthful behavior on the job when he described an incident from the previous year in which a nineteen year old worker who, while ignoring regulations to not use cell phones on the jobsite, was run over by a piece of heavy equipment and later died. Sometimes hazardous behavior was associated with all ages of men, rather than younger workers specifically. This was the case when Darren discussed masculinity on the job, "The main thing is, it's still a maledominated field and males seem to have egos. So that seems to always pop up at least once a day." Two participants, however, discussed safety issues associated not only with younger workers but also with older workers. One of these participants, Clinton (a senior project manager), had the following to say: "And a lot of the time the young guys are teaching the old guys... about safety. A lot of the old guys have been doing it wrong for years... the young guys

are trying to correct them." In this quote, he attributes older workers' safety violations to habit rather than rash behaviors. No participant described older workers as behaving competitively or rashly on the job.

Workers talked at length about OSHA requirements and job-site protocol for safety practices. They often discussed on-the-job safety as the responsibility of management teams. All of the participants who were not in management discussed how some job sites were safer than others because of the ways that general contracting companies handled safety issues. It is important to note that workers talked about management as representative of the company rather than as individuals holding managerial positions. Companies that focused on safety were often described as "caring." One example of this came from Ted, who described management in one particular firm for which he had worked: "It seems like it's more of a caring atmosphere, you know. And when they make these safety concerns so high priority it makes you feel good that they're that concerned about you. That they're taking that extra step to make you more safe." This example illustrates how a company's approach to safety can make workers feel valued. In addition, the narrative seems to indicate that the primary responsibility for safety falls to management in the company. Other workers talked similarly about management's responsibility for safety, though not all companies were evaluated equally. Some companies considered successful at providing safe work sites were viewed as insurance-driven. In other words, some workers felt that management-driven safety programs were often compelled by financial incentives provided to companies for accident-free workplaces. Workers preferred companies that they felt cared about them, but ultimately felt that whether driven by care or money, management was primarily responsible for safety.

Participants discussed supervisory personnel within sub-contracting companies as

individually responsible for safety on the job, but potentially hampered in carrying out this responsibility by company priorities. Javier, a supervisor, described his own responsibility for his crew's safety as a member of management. He also discussed at length how management personnel above him failed to consistently provide adequate safety equipment for workers. John also discussed an incident in which a contracting company had hired his own sub-contracting firm to do a job without first conducting the necessary research into the site. This oversight resulted in an entire crew and their families (secondarily) being exposed to asbestos. Several participants also discussed how "keeping the schedule" sometimes resulted in unsafe work conditions. Most of these respondents felt that the current economic depression played a part in this phenomenon, with sub-contracting companies feeling forced to accept timelines that they knew they could not safely meet. Javier said, "We're having to work so hard and extra hours and take shortcuts sometimes just to get it done in time...The scheduling people are not caring about safety." Clayton stated, "We did 900 hours in eight weeks a while back." Very often those in supervisory positions felt their responsibility for safety was to operate as a buffer between unsafe practices suggested by higher management and the needs of their crew. Javier described an instance in which he felt his men were being endangered by a particularly grueling schedule. He reported having told his men, "I am not going to make you. If you say no I will tell them we're not working, and I call my office and general contractor." Jamie described his responsibility for safety on the job in a similar manner, "If it's not safe I'm not sending my men out there."

However, interviewees who worked in general contract management discussed safety as the responsibility of workers and supervisory personnel, and only saw themselves as overseers.

All of the management personnel talked about walking the site, looking for safety violations.

They reported varying ways of approaching safety violations, from kind reminders to removal

from the job-site. They all discussed safety programs provided by their companies, which included activities like training videos, safety meetings, and good planning. However their narratives ultimately situated themselves as overseers to safety, policing workers and sub-contractors and providing information, but not ultimately responsible for unsafe practices. Kurt provided an excellent overview of these ideas.

It's amazing to see a sub[contractor] mobilize...with a gang box full of safety equipment ...Then there's the other guy who... wants to argue about a hard hat or safety glasses. ...I know we've taken people off the job because of safety. ...I think the real badasses are the guys that are wearing the safety harnesses and the full belts and all the safety gear and still toting whatever as well. ...versus the guy over there taking a shortcut or trying to be a cool guy.

However, all of the management personnel talked about the responsibility of workers to not only approach their own work safely, but also police each other's work practices. All of the management personnel discussed the idea of workers being responsible for each other's safety by giving each other safety reminders. Kurt said, "They need to care for that poor little 20 something who doesn't know how to tie off properly. They need to look out for them." Clinton discussed his ideas on this, "You know, be your brother's keeper. Help him understand."

When workers were asked what policies were most beneficial to job-site safety, the following issues were mentioned at least once, though several were mentioned multiple times by multiple participants: the stringency of regulations, easily accessible safety personnel, well-researched sites, management respect for workers, and a willingness to allow workers to focus on safety rather than productivity. John, 63, was not satisfied with the work-site safety provided by

most general contractors, saying that in the current era there was an 'illusion of safety' rather than actual safety for workers. He went on to state that there were particular issues at play in the last several decades that made construction even more dangerous than in previous years. He explained that not only did the 'illusion of safety' lull workers into a false sense of safety, but that the current economic downturn had made people 'job scared.' He said, "If you are jobscared... you will do whatever to keep this job. If you know there are a thousand other unemployed guys just chomping at the bit for a chance at your spot... you know they will let you go in a heartbeat. ... You don't care if it isn't safe." His concerns were echoed by Javier, who works primarily with Hispanic workers who feel this type of pressure all the time, rather than specifically when the economy is in decline. Javier reported that the precariousness of being a Hispanic worker often made it necessary to accept positions with sub-contractors who at times failed to provide adequate safety training and equipment. In addition, Javier reported that some trades that rely primarily on Hispanic workers often do not provide benefits and pay equal to other companies. 'They [Hispanic workers] don't want to lose their jobs so they'll work for whatever they'll give them. I guarantee you right now, if our company was to take benefits away, if we had two people quit it would be too many.' Clinton, a senior project manager with a general contractor, reported that sometimes sub-contractors who primarily employ Hispanic workers pay by 'the piece' rather than the hour. Some examples of this type of work are block masons and dry wall installers. In these cases, workers will be paid according to how many blocks, tiles, or wall segments they install. This places emphasis on work pace and productivity rather than quality or safety, and may lead to unsafe work practices.

These types of practice were not the only safety issues mentioned in relation to race/ethnicity. Javier, Cody, and Clinton all recounted instances where Hispanic workers were

treated as 'interchangeable' laborers. In all of these stories, Hispanic workers were marginalized by not being treated as individual workers by employers. Hispanic workers are often juggled around from job-site to job-site. This does not allow workers to gain important skills through regular experience with tasks or develop important work relationships with managers and companies. Companies treating Hispanic workers in this manner may consider the health of workers secondary to having an easily mobilized workforce. Javier recounted a story of a workplace situation in which a Hispanic worker had a tragic fall. While management personnel waited for emergency services, they discussed the ways in which the work for the day could go on without the worker. According to Javier, the white, male safety supervisor (member of management) said, "Oh well. It's just a Mexican, I can get him replaced right away."

Javier also reported that Hispanic workers will fail to report work injuries and accidents. He said that sometimes this failure to report is due to language barriers, but in many cases it is about job security: 'A lot of people think that they might lose their jobs, especially Hispanics...

They'd rather go buy a Band-Aid and pay for it themselves than to report an accident because they might get laid off. It is a fact." Those who feel that their jobs are more precarious may be less likely to report a workplace injury or illness. According to the narratives of these participants, the relationship between job security (fear of job loss) and non-reporting of injuries and illnesses should be kept in mind when investigating racial and ethnic differences and masculinity in health. Work-site safety is an important aspect of occupational health for all workers, and these interviews highlight the importance for construction workers. There seems to be some disagreement between workers and management as to where the ultimate responsibility for a safe work-site falls. In addition, race and class relations play an integral part in creating job-fear or job stability, which is a primary factor in work-site safety.

In the case of construction workers, the reporting of workplace injuries and illnesses may also be skewed based on how these men narrate these types of incidents. I asked all participants if they had ever been injured on the job. While some of the respondents did report certain incidents, such as falls, they also qualified their answers by comparing such harms to incidents that they did not consider injuries. The following quotes exemplify how workers talk about what is not an injury: "Fingers got crushed, finger or hands cut on sharp edges of metal ...ankle twisted, stuff like that;" "You know, just cuts, a couple of stitches, break a finger, not nothing major;" and "I got metal in my eye and I had safety glasses on... They had to drill that out. It was embedded in my eye." What did count? Respondents reported the following as workplace injuries, not necessarily to themselves: broken ribs, torn muscles, fatalities, lost limbs, broken bones (not fingers), falls with no injury, being buried in a ditch, and long-term eye damage from welding. Workers had specific ideas about what types of injuries counted as injuries, and what did not count. When asked about why he discounted some injuries as non-injuries, Cody replied, "You're going to cut yourself, bang yourself up out there. If you think that's an injury, you're not man enough to do this job. Go get a desk job somewhere. Leave it to us." Not only does this example illustrate the intimate bond between working-class masculinity and physical labor, it also brings up questions about how to obtain realistic measures of workplace injuries in very different occupations.

Discussion

This multiple methods exploration of the ways that gender, race, and class shape the health of construction workers yields results that have implications for how we study and understand men's health as well as how men themselves understand their health. A number of important themes develop when looking at the quantitative and qualitative findings together. First,

occupation, race, class, gender and age matter to men's health, though they operate differently from one another. Second, these findings suggest methodological implications for future research on men's health, including the need for a clearer conceptualization of how men understand their health. Finally, these findings have policy implications, especially in the areas of health care accessibility and workplace safety.

Inequalities Matter

This study explored three intersecting systems as these relate to occupations and health: gender, race, and class, including intersections among these dimensions of inequality. All of these areas were found to be vital to understanding men's health outcomes.

In both the quantitative and qualitative portions of this study, class was associated with negative health outcomes at middle age. In the qualitative analysis, this influence was especially apparent in interviews with workers who had lower incomes, less prestigious positions, and fewer work-related benefits. They reported that were less likely to be able to access important health resources, a reality which may account for some health disparities.

Race was also implicated in health outcomes in both the quantitative and the qualitative portions of this study. Quantitatively, being white was associated with better self-rated health. However it was also linked to more reported physical and organic conditions. The latter finding may reflect a difference in access to diagnostic services and health information. White men may have more access to benefits like adequate health insurance that allows them to receive diagnostic services. For Hispanics, especially those who are born outside of the United States, language and cultural barriers, in addition to lower access to health care, might hinder the acquisition of important health information. Thus, we may see that whites have more knowledge (either through formal or informal avenues) about their own health conditions. In the qualitative

portion, these sentiments were echoed by Javier, who works almost exclusively with other Hispanic workers. He also cited an additional issue related to social relations on the work cite, job precariousness, as an issue for Hispanic workers who may or may not be legal citizens.

At the onset of this project, I did not seek to look at age specifically as an area of inequality. This was primarily due to the limitations of the health data available through the NLSY79. Because health data was gathered from respondents as they reached the age of forty, there was no way to compare health across ages. However, in the qualitative portion of this project, age became a very salient theme in the narratives of men working in construction. Age was used as a way to narrate processes of wear and tear that occurred in relationship to physical labor over time. This finding suggests that more research needs to be done to get a more nuanced understanding of age relations as part of the social production of health for working-class men.

While others, like Williams (2003), have found that occupation matters for men's health, this study highlights some of the ways that occupation matters. In the quantitative analyses, it is apparent that occupation matters on multiple levels. The relationship between occupation and workplace accidents and injuries operated independently, indicating at least two ways that occupation matters. While the total number of work-related illnesses and injuries proved to have a significant relationship to all three of the health measures, in the regressions for self-rated health and physical conditions, working manual labor in the construction industry exerted a separate significant effect. Current conceptualizations of occupational health and safety tend to focus almost universally on risks for workplace accidents, injuries, and illnesses. However, these findings suggest that the relationship between occupation and men's health is multifaceted. Qualitative findings help to illuminate this complexity. Interviews with workers more fully explored the ways that occupation affects health through multiple avenues, including: worker

relationships, occupational structure, availability of technology, workplace safety practices, and access to resources. These findings suggest that occupation plays a primary role in the overall health of workers, and occupational health and safety cannot be separated from general health in its outcomes or implications.

Research on Men's Health

These findings suggest two important findings in regards to men's health research. First, they suggest that men may have particular understandings of their health that can affect measurement. Second, assumptions of health care practices by men based on prior findings may not be adequate in understanding men's health care utilization.

By looking at multiple health outcomes for men at middle age during the quantitative phase of this study, it becomes apparent that various health measures are affected in very different ways by a multitude of factors. In this study, I found significant differences in self-rated health, physical conditions, and organic conditions. Thus, one measure of health is not sufficient to discern patterns of disparity. Health is a multi-dimensional concept and research designs and practitioners should address this complexity by focusing on different health processes. By looking at all three, we can better conceptualize health processes, especially in relationship to the operation of complex inequalities. For example, in the quantitative analysis portion of this study, we find that social determinants of health—that is, gender, race, and class—seem to have a weaker relationship to the number of organic conditions reported, but a stronger relationship to the number of physical conditions reported and self-rated health. Being working-class, being white, and number of work-related illnesses and injuries are linked to all three types of health, occupation to two of them; an interaction between being working-class and white exists for only one.

This issue becomes even more compelling when we look at the qualitative data. All of the respondents compartmentalized their health into two separate spheres: one, which they referred to explicitly as health, was primarily associated with organic health problems and a second, which they did not explicitly link to the idea of health, but which included physical conditions like pain and arthritis. When asked to rate their health, respondents overwhelmingly referred to more specific organic conditions, like heart health, blood pressure, diabetes and so forth. However, upon probing more deeply, I found that workers did not consider—such physical ailments as chronic pain, joint damage, or arthritis, to be part of their overall health, or influence their self-health rating. This compartmentalization has particular implications for how we study men's health, how men understand their own health and health processes, and ultimately how we design men's health interventions. Thus, we need to be more attuned to these different health processes when we are drawing conclusions about men, their health risks, and their health behaviors.

Previous studies have shown that there is a reporting bias for workplace injuries and illnesses, especially in regards to OSHA and Workman's Compensation reporting (Berdahl & McQuillan, 2008; Pransky, Snyder, Dembe, & Himmelstein, 1999). I chose to use the NLSY79 data rather than OSHA incident data for this reason. However, the quantitative finding that working-class whites report more work-related injuries and illnesses than other workers is in contrast to studies that have reported that racial and ethnic minorities are more likely to be exposed to hazardous work conditions (Murray, 2003). In a related qualitative finding, participants reported that those who are job-scared are less likely to report injuries on the job. These findings suggest that the greater likelihood of white working-class men to report work-related injuries and illnesses may not, in fact, point to a greater likelihood of being injured or

becoming ill, but to greater job stability resulting in the ability to report these illnesses and injuries. This potentially leads to faulty data regarding workplace injuries and illnesses, and should be explicitly considered in any research design.

The ways that workers define work-place injuries might also affect the quality of data regarding work-place injuries and illnesses. Participants in the qualitative portion of this study designated many work-place injuries as non-injuries. Their definition of injury tended to focus on wounds that were very dangerous or life-threatening. Given their emphasis on level of dangerousness, they might list a near fall as a work-place injury, despite the fact that the fall did not actually occur. Thus, they also discounted a number of smaller, less significant injuries (like burns or cuts, even cuts that required stitching) as non-injuries. Understanding how men themselves define the concept of work-related illness and injury is of paramount importance to gaining quality data and creating adequate theory regarding men's occupational health and safety and men's health behaviors.

Finally, prior research has found that men do not adequately utilize health care resources (Courtenay, 2000). However, in the qualitative portion of this study, I found that men who had access to health care resources utilized these resources regularly. Men who reported a lack of adequate health care accessibility also reported not using health care resources. The narratives of this latter group included comments that could be construed as masculine discourse about the unimportance of regular health care, especially preventative care. Citing characteristics like independence or pragmatism, those men explained why they did not use those resources regularly. However, all three of the participants who reported a lack of access also reported that they would like to have access to these services. This suggests that we need to dig more deeply

into the narratives of men to fully understand the relationship between masculinity and health care utilization.

Policy Implications

Among the many policy implications of these findings is reinforcing previous scholars' [cite] emphasis on the importance of adequate access to health care. Qualitative findings suggest that availability of health insurance is not sufficient to guarantee adequate access. Some employer-provided insurance is prohibitively expensive, carries high co-pays, and offers little coverage. Participants with minimal access to health care services did not utilize health care services regularly. However, participants with better access through health care benefits utilized health care services, including preventative medicine and regular check-ups. These participants described their health as largely controllable through these services.

In relation to work-sites and construction management, these interviews highlight issues that could be addressed with work-site or company policies and training. First, workers and management may have conflicting ideas about who bears responsibility for workplace safety. This point of tension needs to be alleviated through training and information, and shared responsibility. Many of the workers discussed health and safety issues associated with jobs or companies that place productivity above safety. Those in management did not see this as an issue. Given the importance placed on this topic by workers, companies might benefit from reviewing practices that might be interpreted as being productivity-driven rather than safety-driven.

Finally, job stability is of paramount importance to safe work practices. Those who feel that their positions are not secure are more likely to feel pressured to participate in unsafe work practices and less likely to report safety issues and accidents. They are also might be likely to

ignore other threats to their health and safety, like faulty safety equipment, exposure to hazardous substances, low pay, and sub-standard benefits and protections. Thus, designing job-structures that create a sense of support and stability for workers could offer significant health benefits (and ultimately, lower costs for employers) for those working in the construction industry.

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CHAPTER 3

Wear and Tear: The Social Production of Disablement in Construction Workers

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Abstract: Based on in-depth interviews with construction workers, this chapter explores the social production of disablement, or disability as a process, and the effect of institutionalized administrative definitions of disability. This study finds that the intersections of age, gender, and class are implicated in the production of occupational disablement. In addition, the power of definition residing with administrative entities plays an important role in how workers come to understand disability and disablement, ultimately affecting their ability to be self-advocates. This study also suggests that current conceptualizations of disability are not adequate for these participants whose experiences of disablement highlight its processual nature. 'Becoming' disabled, constricted activities outside of those defined by Activities of Daily Living (ADL's) or Instrumental Activities of Daily Living (IADL's), and activity limitation due to significant pain and discomfort are all issues that should be addressed in disability conceptualization. Policy and definitional extensions are discussed.

Keywords: Disablement, Social Production, Working-class Masculinity, Disability models, Administrative definitions

Wear and Tear: The Social Production of Disablement in Construction Workers Disablement

Disability is a contested concept. Bio-medical, social, and phenomenological models of disability have offered differing ontological and epistemological foundations (Williams, 2001). While none of these models treats disablement as particularly static, they also do not extend an adequate conceptualization of disablement as a process. Failing to adequately address the process of disablement impedes our understanding of both who acquires a disability, and how disability is produced. This omission affects not only how we understand disability, but also how we approach it in practice and how we design interventions. Current research tends to focus on those who identify themselves as having a disability (or a disabling condition) rather than those who are experiencing the process of disablement, or conditions that may lead to disablement. In addition, disability research generally focuses on individuals who acknowledge disability as part of their lives, leaving a gap in research on those who may not define themselves as having a disability, despite meeting the criteria of one or more of the models/definitions of disability. This further solidifies the idea of disability as a state of being rather than a process, and limits our understanding of the factors associated with disablement over time. In this article, I employ data gathered from a larger research project that includes interviews with twelve construction workers in order to explore disability as a process, and I discuss the implications of this depiction of disability for scholars and practitioners.

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¹ In order to differentiate my formulation from others, in my discussion I use the term disablement (rather than disability) whenever feasible. This serves to draw attention to its processual nature, rather than a state of being (for the individual or the environment).

A Brief Introduction to Primary Disability Models

Bio-medical models of disability places disability firmly within the realm of the individual. These models "take... the presumed biological reality of impairment as [a] fundamental starting point" (Williams, 2001). Disability and social science scholars alike have critiqued the bio-medical models for failing to adequately acknowledge A) the distribution of power in society and how this affects what 'counts' as disability; B) how the social structure is implicated in who is more likely to have or acquire a disability; C) how an ableist society creates disability through inaccessibility (Altman, 2001); and D) the experiences of those with disabilities (Wendell, 1999).

Social models of disability were designed to offer an alternative to the medical model. While there is no unifying social model of disability, all social models acknowledge that disability is socially constructed, in the sense that it does not exist as a reality outside of a social context (Thomas, 2002). This is not to deny the material reality of some conditions, but instead to acknowledge that the definition of any condition as disabling is dependent upon the environment in which it is located. Thus, according to this view, disability is never simply a condition belonging to an individual; rather the external social and physical environments produce it. Various social models have extended this characterization of disability to include ways in which it is contextualized by time. Disability can occur quickly, often seemingly instantaneous, or it can occur over long periods of time (Verbrugge & Jette, 1994). It is also contextualized historically and geo-spatially; what is considered a disabling condition in one historical period or culture may not be considered so within another. Finally, disability is dynamic at the micro level (Zola, 1989), contextualized by an individual's experience and situation. Persons with a potentially disabling condition may experience themselves as disabled

in particular contexts, and not in others. This difference may be influenced by built environments, assistive technology, personal assistance, or the company of others with similar conditions or limitations.

The social model proposed by Verbruge and Jette (1994) deserves some attention as it theorizes disablement as a process rather than a state-of-being. In extending Nagi's (1991) model, Verbrugge and Jette hypothesize a set of steps associated with disablement, and also acknowledge conceptually the relationship of outside forces to the process of disablement. According to their approach, there is a predictable pathway through which individuals pass as they are acquiring a disability: pathology (diagnosis of condition); impairments (dysfunctions and structural abnormalities in specific body systems); functional limitations (restrictions in basic actions); and disability (difficulty performing tasks of daily life). These steps may occur over a long period of time or in quick succession. In addition, Verbrugge and Jette (1994) include considerations of risk factors, intra-individual factors, and extra-individual factors that might have an impact on the process of disablement. While this model could be interpreted as providing a space to include structural issues, this space is largely implicit, and has not been utilized effectively to explore the role of social structure in the production of disablement, including the power to define it. Verbrugge and Jette's (1994) discussion of the model includes a critique of existing measures of disability that focus only on preconceived activities like Activities of Daily Living (ADL's) or Instrumental Activities of Daily Living (IADL's), arguing that this type of focus disallows other activities that may be associated with quality of life for those with impairments.

Phenomenological disability scholars have critiqued the social model of disability for ignoring the lived experience (or material reality) of disability (Wendell, 1999). More

specifically, the social model of disability pays very little attention to the physical realities of particular types of limitations, especially those that include chronic illness or pain. In addition, while the social model provides important insights that combat ableism in society, it is unable to fully address the issues of all people with disabilities. Because it is implicitly based on the idea of the male wheel-chair user, with no chronic illness, it fails to address adequately the heterogeneity among those with disabilities, including the specific issues facing women with disabilities (Morris, 2001). The focus on external barriers to participation and its connections to the disability rights movement (focused on policies, especially work policies) render other experiences of disablement invisible. While the social model has made huge strides to reduce external barriers and discrimination based on ability, it has been part of a social movement spearheaded primarily by middle-class men and has approached social issues from this perspective. This perspective has largely ignored experiences of impairments and the "unhealthy disabled" (Wendell, 2001), of which women make up a large proportion (Miceli, 2010). This distinction of the "healthy disabled" person has been a cornerstone of the social model and its goals of distinguishing disability from illness and counteracting the idea that those with disabilities' lives are pitiable. Because the phenomenological model focuses on individual experiences of disability, it may be used to explore concepts like pain and illness as well as the implications of the social structure on the creation and maintenance of disability (Wendell, 1999).

Theoretical models of disability do not specifically address the importance of administrative definitions in the ways that disability is understood. However, the ways in which disability is defined by gatekeepers also situate disability within the larger social structure. Formal disability designation requires legitimation, which is often organized through particular

administrative agencies and definitions (Brown, Hamner, Foley, & Woodring, 2009). At the federal level of government, the Social Security Administration (SSA) plays a pivotal role in this regard as it handles all applications for disability status in relationship to the receipt of federal benefits like Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI). Determination of disability through the SSA is the only way that important benefits can be accessed. SSA defines disability as a condition that leaves a person unable to do "substantial work" for at least one year or which will result in death (Social Security Administration, 2010). This definition offers no consideration for other activities through which individuals may experience disablement (i.e. sexual function or leisure activities). At the state level, occupational injuries and illnesses are handled through the Workers' Compensation program. Again, strict definitions and programmatic guidelines limit an individual's ability to receive benefits. Both of these disability gatekeepers focus on work-related definitions of disability (rather than other models of disability). By defining disability as an inability to work, these gatekeepers indirectly define bodies as labor power. Legitimation is required in order for the individual to receive the benefits of disability as a protected status, and very often this legitimation process is dehumanizing (Brown et al., 2009).

Each of these perspectives has strengths and weaknesses, ultimately making any single existing model insufficient for the adequate theorization of disability. While each of the models attempts to fill gaps that exist within other models, there are still important aspects of disabilities that have not been sufficiently explored. First, none of the primary disability paradigms adequately addresses the processual nature of disability. This means that our conceptualization of disablement lacks an understanding of how disability is produced, how people come to have disabilities, and their experiences of this process. Along these lines, scholars do not explore how

social inequalities play a critical role in how and by whom disability is defined. A second related omission is that even the social model, with its focus on disability defined as the gap between individual capabilities and the external environment, fails to fully evaluate the ways in which the social structure is implicated in the production of disability through systems of inequality that places particular groups at increased risk. Third, none of the models sufficiently explores the implications of administrative definitions and their effect on self-definition, and ultimately selfadvocacy. Definitions of disability that mirror the more powerful bio-medical or administrative discourses may lead to a failure to identify as having a disability, which ultimately affects an individual's ability to claim the benefits associated with disability as a protected status, or acknowledge the implications of the social and physical environments in the creation and maintenance of disability. It additionally limits the opportunities for intervention. Finally, current measures focusing on Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs) or work activities fail to acknowledge the importance of other activities to the issue of disablement (one exception is Verbrugge and Jette's 1994 model), or the level of comfort associated with these activities (i.e., whether these tasks can be performed without significant pain or discomfort).

Occupational Disablement

Poor health or disability that is created through the activities of work illustrates the direct link between the body and the larger processes of production and consumption. The placement of bodies within a complex system of intersecting inequalities affects the likelihood that one will occupational health and disablement. Some groups of people are more likely than others to be involved in hazardous occupations, based solely on class, race, gender, and immigration status. In addition, the operation of power within the larger social structure affects the hazards

associated with particular occupations, as well as which occupations are defined as hazardous. For example, power is not evenly distributed within the gender system, creating particular hazards for female workers (i.e. injury through interpersonal violence on the job).

Simultaneously, the power differential in an unequal gender system, defines women's employment largely as un-hazardous. By exploring the situations of workers within such occupations, we have an opportunity to examine how disability is produced. That is, because they are still working, such persons are not seen to be "disabled." At the same time, they are using their bodies in occupations that, through the nature of the work as well as the nature of the power relationships within the occupation, ultimately can lead to disablement.

The construction industry is one of the largest and most dangerous in the United States (Bureau of Labor Statistics, 2010). Construction workers face threats to their bodies on a regular basis. The rate of non-fatal injury/illness resulting in days away from work for the construction industry was higher (4.7 per 100 workers) than the national rate (3.9 per 100 workers) for all private industries (Bureau of Labor Statistics, 2009). Additionally, in 2009 workers in construction suffered the most fatal injuries of any private sector industry, though construction did not have the highest rate of fatal injuries (Bureau of Labor Statistics, 2010). Not only are construction industry workers particularly vulnerable to job-related accidents resulting in injury or death, but the aggregated effects of physical labor can result in chronic conditions leading to disability (Bureau of Labor Statistics, 2008). While these statistics are widely disseminated, the field of occupational health has long accepted them as being indicative of the nature of the labor being performed. However, it is necessary to consider how social relationships and power relations on the job play a part in the hazards associated with an occupation.

Not only does the construction industry offer a revealing vantage point from which to examine the effects of work on the body, it is also an excellent location from which to explore the relationship between working-class masculinity and disablement. Gender is often produced and maintained within the work environment (Salzinger, 2003). When gender is understood as an ongoing accomplishment, as opposed to a fixed attribute of the individual, it may be seen as negotiated within contextual environments, like work. Manual laborers within the construction industry are largely men from working-class backgrounds. Disability stands in opposition to the ideals of masculinity (Gerschick, 2005). Ideals associated with masculinity like physical strength, athleticism, and independence can be problematic for men with disabilities. While middle and upper class masculinity can often be re-negotiated through other attributes like mental acuity, financial stability, and the accumulation of status goods, working-class masculinity is a very physical form of masculinity (Baron, 2006). This potentially leaves working-class men especially vulnerable to a loss of masculine status through disablement. This tension between working-class masculinity and disability makes this group of workers particularly important in an exploration of how disablement is defined, perceived, and experienced through a working-class masculinity lens. I will focus my attention on three primary research questions: 1) How do the experiences and narratives of construction workers illustrate disablement as a process? 2) How are class and gender implicated in the production of occupational disablement? Specifically, how is working-class masculinity implicated in the production of occupational disablement for workers in the construction industry? and 3) How do workers in the construction industry experience and define disability? How do these definitions and experiences relate to bio-medical, social, phenomenological, or administrative definitions?

Methods

The data for this analysis come from semi-structured, face to face interviews with twelve construction workers in the southeastern United States. Interviews, averaging an hour and a half, focused on workers' views of the nature of their work, their experiences with their bodies and health, and job-site relationships. This method allows for active and collaborative construction of meaning (Holstein & Gubrium, 1995). This study is largely exploratory, given the focus on largely unexplicated concepts such as the processual nature of disablement, and the relationship between intersectional inequalities and disablement, making it important to use a method of data collection that allows for in-depth exploration. In the study of inequalities, it is helpful to focus attention on the situated knowledge (Haraway, 1988) of those who experience marginalization. Thus, the design of this study is founded on the idea that laborers within the construction industry have a situated knowledge of the ways that power and inequality operate in their lives through their occupations

Verbatim transcriptions of interviews were coded iteratively, and focused on segmenting the data and then reassembling it (Boeije, 2010). The first round consisted of close reading and comprehensive coding (Creswell, 2007). In the second round, I coded for emergent themes (Miles & Gubrium, 1994). The final round of coding consisted of more specifically-guided coding, focused on areas of interest related to these research questions (Boeije, 2010). I chose to do all three of these types of codes in order to best evaluate and segment the data to account not only for ideas that were theoretically linked to this study, but also for the emergence of the situated knowledge (Haraway, 1988) of the participants. I analyzed data using a constant comparative approach throughout the process (Creswell, 2007). Analysis occurring after coding

consisted of the identification of themes, and searching for areas of convergence as well as divergence (Seidman, 2006).

Both management personnel and laborers participated in interviews, but in many cases, the lines between these were blurred. I interviewed seven participants who were in management positions for sub-contractors, but who still considered themselves to be laborers. One of these was a business owner, one worked for a company using a 'working superintendent' model (this means that the job superintendent is expected to perform regular labor in addition to the administrative responsibilities of the position), and the rest held various management positions within a sub-contracting business. Of the remaining interviewees, two participants were laborers with no management title; the other three participants held management positions within general contractor companies. Respondents ranged in age from thirty to sixty-one, and reported being in the construction industry between twelve and forty-five years. One participant identified as Hispanic, the rest as white. Table 1 summarizes select characteristics of the sample, including the pseudonyms assigned to each participant.

Table 3.1. *Selected Participant Characteristics*

Name	Age	Most Recent Occupational Title	Years in Industry	Type of worker
Clinton	49	Senior Project Manager	27	Management
Jessie	60	Superintendent	41	Supervisory Personnel/Laborer
Darren	57	Senior Superintendent	30+	Management
Cody	38	Concrete Finishing Supervisor	22	Supervisory Personnel/Laborer
Ted	38	Plumber	17	Laborer
Hugh	53	Plumber	34	Laborer
Jamie	61	Superintendent	41	Supervisory Personnel/Laborer
Javier	29	Structural Steel Supervisor	12	Supervisory Personnel/Laborer
Kurt	44	Project Executive	28	Management
Allen	55	Concrete Finisher/ Owner	40	Supervisory Personnel/Laborer
Clayton	48	Project Superintendent	18	Supervisory Personnel/Laborer
John	63	Project Superintendent	35+	Supervisory Personnel/Laborer

With the exception of Clinton, a 49 year-old senior project manager, all of the participants came from working-class families, many of which had histories in the construction industry. They often described learning their trade from fathers and grandfathers, or related stories told by earlier generations of construction workers. Those who entered into construction in the 1970's and 1980's spoke of vocational or apprenticeship programs that were designed to train them in a trade. At the time, construction was considered a lucrative opportunity for young men from working-class backgrounds. In addition, many respondents discussed how manual labor was an expectation of working-class boys growing up. Given their gender, class, and industry backgrounds, these men were very likely to end up in a manual labor trade. Thus, ideas of working-class masculinity, especially in light of familial history, may play an important role

in their continued participation in the trades. Their stories often presented contradictory feelings about working in construction, at once a source of great pride as well as great anxiety and physical breakdown. Alternatively, Clinton spoke of his participation in the industry as a business decision based on job availability when he graduated from college. His description of the industry and the work itself was much less tied to ideals associated with working-class masculinity or family pride. He is also the only participant to have never worked in a labor position within construction at some point in his career.

Findings

Disablement: Process and Production

Clear evidence of the processual nature of disability emerged in these interviews. The interconnectedness of the process and production of disability became evident as well. In this section, I discuss the findings associated with the process and production of disablement together, as they are nearly impossible to disentangle within the narratives of respondents. Worker risk narratives focused on two types of risk associated with disablement: wear and tear and sudden injury. These narratives illuminate the very different trajectories disablement can take. Different as they may be, both types of disablement are tied to social relationships associated with larger economic and technological forces, which were also noted by participants. In this section, I explore the ways that workers described wear and tear as well as sudden injury and the associated risks. In addition, I explore how workers tied the production of these processes to larger forces of economics and technology. These narratives offer some insight into the experience of disablement by workers in the construction industry.

As a specific type of disablement, occupational disablement can occur over years of exposure to hazardous or strenuous work environments, or it can happen very quickly with

serious work-site accidents. Participants in this study were cognizant of both types of threats to their bodies, and differentiated them from one another.

All of the workers described the long-term effects of working in construction as detrimental over time. Many of them used the phrase 'wear and tear' to describe this effect. Even general contractor management interviewees discussed it, though usually in relationship to workers rather than themselves. Many of the workers described increased joint pain after years of 'bending, stooping, kneeling, climbing, and all that.' All of the workers, with the exception of the three in general contractor management, described pain in at least one of the following body areas: knees, elbows, shoulders, legs, back, hips, and neck. Most of them mentioned more than one. For some of these workers, access to health care services through good health insurance minimized the effect this pain had on their everyday lives. Workers who reported having adequate insurance described seeing their doctors and getting advice or treatment for their pain. Those who did not have adequate insurance (either no insurance at all or insurance with little coverage and high co-pays) talked about pain and breakdown as inevitable. Hugh reported having affordable health care coverage, and when asked if he had any concerns about his future health, he replied, "No I don't think so. I think with the insurance and all that they have and the way that we're doing stuff now, it should be pretty good." In stark contrast, Clayton reported that he never sees a doctor unless he has an emergency situation, despite the fact that he is fairly certain that he has a severe back condition. While his company offers health insurance, and it costs around 3% of his monthly paycheck, he also reported that there are large co-payments and many conditions and procedures the policy fails to cover at all. For example, his policy does not adequately cover an MRI to check his back. So Clayton continues working, but fears that if the condition is serious, one wrong move might result in a significantly worse condition. Both

Clayton and Cody openly admit to purchasing medication illegally to manage pain, due to their lack of adequate health insurance.

Very often respondents used age to narrate the progression of physical conditions associated with wear and tear. While most of the respondents reported that their work in construction had a negative effect on their bodies, many were not certain that it was the job alone. Most of the middle aged or older men who discussed wear and tear at least partially explained the beginnings of breakdown as a combination effect of age and physical labor. For several of the participants, age superseded employment in construction. Allen (55 years old) had the following to say about age and changes in his body: "Knees don't bend like they used to, you know, and the back. And your elbows and your shoulder hurts, and just arthritis I guess. I don't know. Just getting older." Even younger workers talked about age. Cody, 38, when talking about his physical condition said, "...just getting old, you know? I'm almost 40."

The ways that workers used age in discussing disablement makes clear their view that it is a process, something that happens over time. In addition, their focus on age naturalizes the process of disablement in such a way that it negates consideration for the ways that social relationships are implicated in the process.

Participants also discussed the importance of historical period on bodily conditions. That is, not only age and time on the job led to the process of physical breakdown, but also the time frame in which they began manual labor in the construction industry. Interviewees mentioned that new procedures and technologies protected worker bodies, regardless of time on the job. And some workers felt that having worked in the field before these new techniques and technologies emerged (i.e., in the 1970's and 1980's) was more to blame for current physical conditions than time on the job in general. Hugh, 53, had the following to say about the reasons

for pain in construction workers over time: "The old timers, they pick up a ten inch pipe, twenty feet long. Two of them and [then] try to carry it. And that's probably 300 pounds. And they didn't think anything about it. Now we're using cables and stuff, hoists and stuff to hoist them up." Several participants echoed these sentiments, talking at length about not only changes in technology leading to less physical exertion, but also altered safety practices on the jobs resulting in fewer major injuries.

In addition to wear and tear, respondents also talked about work-site injuries as potentially life-threatening or permanently disabling. For instance, Hugh, a 53 year-old plumber, tore the muscles around his knee when he twisted his ankle on a job site. This injury led to the permanent surgical removal of the surrounding, damaged muscles. Cody, 38, related a story about having his knee crushed by a 'buggy' on the job which resulted in reconstructive surgery and long-term knee problems. Other respondents, while having never had a serious injury on the job, could recount job-site accidents and injuries they had witnessed over the years. Primarily consisting of stories of terrible falls resulting in paraplegia, death, or coma, these narratives indicated that while many of the participants in this study had not experienced these types of accidents, they were definitely aware of the risks. However, their understanding of work risks were definitively tied to bio-medical and administrative definitions of occupational health and safety and respondents gave little or no indication of the ways that social relationships might be implicated in risks to their safety and health.

Inequality and Disablement

It becomes apparent through these interviews that inequality and disablement are intricately interwoven. Not only is inequality implicated in the process of creating disablement, but work and disablement are likewise implicated in the processes of inequality. In the first case,

working-class masculinity plays a part not only in entry to construction but also the work practices associated with disablement and, as will become evident, the way that disablement is defined and experienced. Also, disablement and age (often used interchangeably by respondents) are associated with increased inequality, especially in relationship to financial and work stability.

These workers also tie their bodies to the historical and social landscape in which they are positioned. As working-class men, they are expected to work hard physically, take risks with their bodies, and accept the physical breakdown which occurs. In addition, these respondents touched on the ways that their social positions – as men, specifically working-class men, and as sons and grandsons of construction workers – led to their choice of occupation. Despite showing immense pride in their work, only Jessie (age 60) wanted his own children to enter the industry. His son is now a certified electrician, for which Jessie is enormously proud. Overall, participants reported having continued in the profession, in part, to ensure that their own children would have other options. Jamie, a 61 year-old plumbing superintendent, has one child, a grown daughter. He had the following to say about a hypothetical son: "I'm a plumber. Now, if I had a son, you know what I'd tell him? 'Don't you go getting into plumbing. No, absolutely not! Hell no.' Working-class men in construction may be continuing a familial tradition in the skilled trades, but it is one that they do not wish their own children to continue. Thus, working-class men's work in construction may symbolize the sacrifice that they make in order to ensure a brighter future to their own children. This type of sacrifice, literally the sacrifice of their bodies, is bound up with ideas of manhood, specifically working-class masculinity's emphasis on provisioning, physical labor, and independence.

Participants described many other ways in which inequalities were related to disablement.

Not surprisingly, respondents were aware of the relationship between their ability to work and

their ability to live. At the same time, this relationship highlighted a certain anxiety about physical breakdown. Aware that the mixture of age and working in construction had an effect on their ability to continue working, several workers voiced concern about the future. Cody, a 38 year-old concrete worker reported that he was now barely able to work. "What are you going to do? I don't have any other skills, didn't finish high school. It's all I know how to do. But I got a family, you know, they depend on me." Javier, a 29 year-old structural steel worker reported that he is thankful for getting a supervisor position, as it might allow him to stay in the business longer. He noted that he had never known anyone to retire from steel work, and that he had very rarely witnessed any steel worker over the age of 40. "And we all know, we all talk about how this shouldn't be forever, this isn't a forever thing. You have to take your damage, and save the money that you're making because you're not going to make it forever in this industry. It is a known fact that people are not going to make it." About his own future, he said, "My plan is to pay my house off and quit the industry when I get about maybe 35 or 40 years old." When Clayton was asked about what he would do should the doctor tell him that his back condition was as serious as he suspects it is, he replied, "At this point, I would lose everything I'd been working for." He said that if that diagnosis were made, he would just return to work and continue until he physically could not do it anymore. These are poignant examples of the tenuous nature of disablement as it is occurring. These participants described ways that they approached the changes in their bodies in order to avoid leaving work. This was necessary not only to their continued survival, but to the maintenance of their status as working-class men who, in their view, were not yet old enough to claim disability status.

These tensions make clear that construction workers' ability to work in physical labor comprises their main access to resources. Though most of them state that their income is

sufficient for what they need, they also report having a difficult time building wealth in the form of traditional savings or retirement savings. Many are expecting to be dependent on Social Security for their retirement years, and do not anticipate receiving a supplemental, companyprovided retirement pension. Allen, a 55 year-old concrete business owner turned school maintenance worker, plans to work until he gets too ill in old age to work, "like my dad and granddad did." The future he sees for himself as a retiree occurs only after he becomes too old to physically do work, and does not include any expectation of income outside of Social Security benefits. Clayton and Javier mirrored this sentiment in their interviews. While Javier plans to pay off his house and leave the industry by 35 or 40, it is not with an expectation of retirement. He knows that he will then need to work in another occupation or industry. When asked about retirement, Clayton said, "We got a...100% employee owned company so we put money in. Probably got sixty grand in there now. But I mean you can't get to it until you retire. And retirement's what, 72? I mean who's gonna be out here beating and banging at 72?" While Clayton may have been mistaken in his estimation of what age he would need to reach in order to access retirement benefits provided by his company, his narrative makes clear his interpretation that his body would not be able to sustain itself in this type of occupation long enough to reap those benefits. Thus, retirement may mean something very specific for these men: life without a means of financial support through labor. None of the non-management workers related stories of the expectation of 'golden years'. Instead, they see their future old age as precarious, a time when they will be without either a means of support or the physical capability to enjoy the time left to them.

Respondents discussed two ways of circumventing or mitigating occupational disablement without leaving the job. One theme that developed around this idea was of using the

career ladder to move into positions requiring less physical labor. Many of the interviewees talked about moving into mid-level management positions as a way of slowing down the process of wear and tear on their bodies. After a long discussion of his knee pain and its effect on his work, I asked Ted (who was training for a management position) how long he thought he could physically continue his work. He replied, "Moving into a foreman's position, you've still got to get out there and work, but it's not as much work on you. It's more of a leadership thing now. I mean there's some hands on but it's less work." However, the career ladder was considered to only be a partial answer to wear and tear. Some newer organizational changes, like the working superintendent model described by Clayton in which management personnel were expected to continue physical labor along with their administrative duties, minimize the physical benefits of moving into management. In addition, several respondents said there was little or no movement on career ladders, limiting opportunities. As Darren explained, starting on small projects and "working your way up" was a way that workers had slowed the process of wear and tear over time. He went on to say, "Well, it's all dried up right now. It's just stale. Everybody's just stuck on a rung." Some workers indicated that the career ladder was not always an either, as Javier pointed out, because they lacked the necessary educational requirements for moving up, or because they simply were not interested in a position that would take them out of the field. Jamie remarked, "I don't think most of the guys that are out here in the field want to move up into the office. They just wouldn't. They don't like it."

Workers also described another method of slowing the progression of wear and tear in how job assignments are distributed on the job. Javier discussed how he always assigned easier tasks to one of his older workers (who Javier reported was 33). When asked what happens if you begin to get older in the steel industry, Javier replied, "You just hope you've moved up into

management or have a position in your crew that you do not have to work as hard." While younger workers sometimes commented on older workers' inability to keep up, they also played a part in helping them keep their jobs by doing the harder tasks themselves. Ted said,

"The way I see it, these two guys, they're getting ready to retire. And it wouldn't bother me if they stayed here in the trailer all day and looked at drawings and me and the other guy is out there. Because they've pulled their time. These guys are what 65, 62 years old? I mean they've pulled their time, they're really good guys, and I know they were hard workers."

These themes of the process and production of disablement, and working-class masculinity highlight several important ideas. First, these findings illustrate how these workers are at heightened risk of serious injury in accidents or through the wear and tear of physical labor primarily due to their social position as working-class males. Second, these findings hint at how working-class men view their bodies and the occupational risks to them. They primarily view their bodies as a tool they use to earn a living, provide for families, and ensure better opportunities for their own children. While workers felt that their bodies were at risk from both wear and tear and critical incidents, they narrated these disablement processes differently. While they felt there was little control over critical incidents, they hoped to control wear and tear. It was wear and tear that they most obviously related to disablement, acknowledging an expectation of decreased bodily functioning over time. However, working-class masculinity, built as it is on a youthful ideal, requires that disablement occur slowly enough that disability itself doesn't come to fruition until it would be perceived as age-appropriate. In their discussions, they talk about the debilitating nature of this type of wearing down, but also discuss the ways that they plan to keep working despite issues like chronic pain. Many hope that they can

minimize the wear and tear so that they only become unable to work (read: disabled) when they decide it is age-appropriate for them to do so. Age, with its necessary ties to time, becomes a way of narrating process. These developing themes reflect the complexity of the processual nature of disablement, capable of occurring over long periods of time, or in an instant, but always in tandem with larger fluctuations in the social environment.

Defining and Experiencing Disability

Power influences and is exercised through how concepts are defined, who gets to define them, and how different definitions are shared with others. The medical establishment exercises a great deal of power over health-related concepts (Foucault, 1973), and often this translates into the power to define what constitutes a healthy, normative body. Social explanations of disability, and to a lesser extent health in general, have increased in visibility and popularity in recent years. Yet, the social sciences still exercise less power to define the body, disability, and health than do the medical sciences. Because of this power differential in the production of health knowledge, policy and administrative definitions are often based on bio-medical explanations of health and disability. These administrative definitions are often the closest ties to lay understanding of these concepts. In order to better understand the effect that these contested models and definitions of disability have on lay understanding of the concept, I specifically asked respondents about the meaning of disability.

All of the respondents defined disability based primarily on administrative definitions, associating the meaning of disability with an inability to work at a paying job. Some stated that disability exists when people are no longer able to work in the job they were trained to do. For example, Hugh remarked, "I think disability means that you're no longer able to do the job that you've been hired to do." Many of the respondents also adopted a bio-medical approach to their

concept of disability. Allen described disability in this way: "Loss of limb, say where you've had to have an operation or something, for a hernia or a disc or ...lifting-type stuff." Often these biomedical definitions mirrored the kinds of ties found between the biomedical model and administrative definitions. This was the case with Ted, who described disability as "...when you are physically not able to work out here, whether it be heart problems, a limb deficiency or something." Six respondents (including all three of the higher-level construction managers) offered some mention of conditions—heart or lung problems, limb loss—that would qualify a person as disabled in addition to their administrative qualifications (not being able to work). This reflects the addition of some aspects of the bio-medical model to their primarily administrative definitions of disability. However, even when medical conditions are mentioned, workers who were not upper level management usually referred back to an administrative definition, saying that even in these cases the individual in question could do some kind of work

Because of the similarities between worker understanding of disability and administrative definitions, most were suspicious of anyone who identified as disabled. For these men, identifying as disabled was tied to receiving disability benefits like SSI or SSDI. With the exception of those in general contract management, most respondents focused their comments on the idea that some people 'fake' disability to avoid working and get free money. The following quote from Ted (38 years old) exemplifies this type of response: "I raise Cain about people being on disability when they don't need to be on disability. You know they can get out there …there's nothing wrong with this person. I see them doing this and that. Why can't they get out here and work? If nothing else, get a job at Walmart and say, 'Hey, how are you doing? Welcome to Walmart.'" In this example, Ted not only brings up his negative ideas about disability, but also of work that is not physical, which is feminized among these participants. These types of responses

illustrate that these men feel that people can work doing something, regardless of their health or ability level, and that if you can work doing something then you are not disabled. Those in upper-level management used the same combination of administrative and bio-medical definitions, but did not refer to disability as an excuse to not work.

Another important theme that developed around disability was its perceived relationship to age. Many workers expected to eventually show signs of disablement, though these were primarily associated with age. Age-related disability was not only expected, advanced age made disablement more acceptable. Youth was associated with ability, and older age was associated with disability. When participants talked about their bodies, they often mentioned that they expected their physical conditions and ability level to worsen with age (not necessarily with more time on the job). For younger people, disability was unacceptable. This also helps illustrate the effect of administrative definitions on individual understandings of their bodies. In these cases, workers associated their own value with their work, to not be able to work was to be without value. Jamie (age 61) had the following to say about people who were receiving disability benefits: "I have, through the years, seen people sorry enough to get on disability because they don't want to work. And I know a few of them. It's terrible. It's very terrible. I mean young boys, I mean young people." His comments seem to disavow the possibility of disability at young ages. In his attempt to define disability, Allen (age 55) had a difficult time articulating the difference he saw between leaving work for disability and leaving work for old age. "...like my grandpa was 70 years old pouring concrete. Was it that he was retired? If he retired does that mean that he is unable or was he unable because he wanted to [retire]? Are you disabled because you just don't want to work anymore? Are you saying this at twenty-five or sixty-five?"

Workers often mentioned that they would "die" if they had to work at a desk job or indoors. Ultimately this negates even occupational change as an option to avoid disablement. They equated disability with a loss of physical power and hence earning power. This ultimately is a threat to working-class masculinity, though none of them explained it that way. Sometimes this contempt for what it would mean to have a disability came through quite clearly. This was the case for Clayton (age 48), who said the following when describing his own ability to continue working despite problems associated with multiple physical conditions: "I hope I still can [work]. I mean, who wants to be disabled?" For these men, the ability to work in manual labor was an extension of their classed masculinity, ultimately meaning that disability was a direct threat to this masculinity.

Despite this distaste for the idea of disability, many of the workers I interviewed would begin to meet the criteria of a social model of disability, especially one that includes consideration for activities outside of ADL's and IADL's as well as participation without significant discomfort. This also illustrates the processual nature of disablement rather than a singular state of being, as it is described in administrative definitions.

Upper-level management excepted, all of the respondents reported conditions that affected the way that they manage their lives and their activities. Some participants reported that there were activities in which they could no longer participate in at all, like Hugh (53) who reports no longer being able to run in his spare time, due to surgical measures taken to correct a knee injury from a work-related accident several years prior. In addition to being forced to give up one of his favorite pastimes, Hugh said that he has significant pain throughout his day, and must change the way he does things on the job and in his spare time. Clayton, 48, said that he often has to be "lazy" when he gets home, because his pain and weakness become unbearable

some days. For him, this meant having to delay projects at home. Allen, 55, said, 'I just don't jump up to my feet anymore, I ease up to my feet.' Other stories were similar, with workers describing things they can no longer do, or can no longer do without significant pain, and how they have adapted to find new ways of doing things that minimize discomfort. These adaptations allowed participants to avoid labeling themselves as having a disability, or as being unable to perform important functions, like work. Several participants mentioned the phrase, "work smarter, not harder," in relation to these types of adaptations.

Ultimately the adaptations they've made to how they approach activities that they find limiting can be a source of pride rather than derogation, in that, for them, these adaptations illustrate personal characteristics like 'experience' and 'wisdom.' In a conversation about younger and older workers, Clinton described how young workers would try to outdo older workers until they realized: "That's what experience is, the gray hair means been there done that." Jessie talked about working smarter rather than harder and trying to impart that knowledge to younger workers: "That's where my experience comes in, sometimes, I try to warn them." Narratives of older workers largely positioned younger workers as a danger to themselves (due to risk-taking) and to the older workers (with their speed and strength). However, these same narratives upheld a distinctly different set of working-class masculine ideals centered on the idea that experience is more valuable than a strong back.

These interviews illustrate how lay understanding of disablement may mirror administrative or bio-medical approaches, and how powerful the influence of these models can be. Both of these approaches fail to consider how external environments are involved in the production of disability. Further, there was no acknowledgment about how their position within the social structure— as working-class men — played a part in their occupational opportunities and

the subsequent breakdown of their bodies. Instead they focused their attention on the nature of the job, individual work practices, and age. They did not view the system extracting profit from their bodies as part of this process of physical breakdown. In addition, they did not necessarily see a relationship between this breakdown and disablement, potentially because of their negative connotations of disability as a signifier of laziness or weakness. Because there is no legitimate discourse of class in which to situate these issues, working-class masculinity can work against the welfare of the individual. In addition, it illuminates the ways in which class inequality has been naturalized even among those experiencing it.

However, by narrating disablement through age, workers naturalize disablement and deny any self-definition of disability. Ultimately, this focus on age undermines workers' ability to advocate for themselves in the face of unequal social relationships. None of the interviewees described themselves as having a disability, despite the fact that all of the workers (with the exception of high-level management personnel) clearly met the social model's definition of disability. All of the workers listed at least one condition which affected their ability to fully participate in activities without some sort of modification to their own behaviors or approaches to these activities. Acceptance of 'wear and tear' as an unavoidable part of their labor in conjunction with administratively driven definitions of disability ultimately circumvents these workers from accessing important services and utilizing disability as a protected status. None of the workers felt that bodily changes caused by work-related wear and tear were conditions that could (or should) be used to access Workers' Compensation or disability-related resources.

Instead, they focused only on acute, on-the-job injuries in that manner. Ultimately, distancing themselves from the negative connotations associated with administrative definitions of

disablement functioned not only to protect their status as working-class men, but to also create barriers to self-advocacy.

Discussion

These interviews help illuminate issues associated with looking at disability as an outcome rather than a process. It is important to note that there is, of course, a difference between narrative explanations of disablement and the actual production of disablement. However, narratives clearly illustrate the ways that intersectional inequalities, specifically class, gender, and age operate to produce disablement. Participants clearly described two separate pathways of occupational disablement: wear and tear and critical incidents. In their descriptions of the former, respondents often used age and time on the job to narrate process. However, this narrative naturalizes disablement in such a way as to negate disability as an outcome. Not only did this narrative form leave no clear demarcation between body effects of aging and those from labor or time on the job, age also operated as a marker of acceptable separation from the workforce. In the case of disablement due to critical incidents, age could not be used to explain (naturalize) the process. Disablement due to critical incidents was potentially more acceptable, from a working-class masculinity standpoint, especially in the case of disability in youth. However, injuries were expected to be severe in order for them to be acceptable cause for workforce separation (or even time off) or changing to non-physical labor.

Working-class masculinity, specifically youthful working class masculinity, was implicated in the process of occupational disablement for these workers. The ideals associated with working-class masculinity directly affected choice of occupation, behavior on the job, interpretation of work, and definitions of disability. These workers viewed the threats of wear and tear (as well as the risk of disablement through critical incidents) rather nonchalantly, as just

part of their daily existence. This was the price they paid to support families, build the world around them, and reinforce their own manhood.

In addition, other areas of inequality had a definitive effect on workers' bodies and their interpretation of their bodies. Inequalities in health care and retirement benefits created different pathways through and interpretations of disablement. Those workers who felt they had satisfactory health care coverage reported that some of the wear and tear effects of labor were being mitigated through the use of medical services. They believed that these medical interventions would operate to keep them in the work force (read: not disabled) until it would be age-appropriate for them to separate from the workforce. Those who did not feel they had adequate health care benefits reported heightened anxiety about the need to leave the workforce before it was age-appropriate (a direct affront to youthful working-class masculine ideals). Retirement benefits did not promise relief after workforce separation for most of these participants.

Career ladders were believed to also circumvent some of the effects of wear and tear, by providing opportunities for less intensive labor. However, there were very few opportunities to utilize the career ladder as a tool, especially with some companies moving to new labor models in which management personnel were expected to continue physical labor. Many workers also did not feel that leaving the construction industry was an option. Bound up with working-class masculine identities, physical labor was used as a signifier of true manhood. In addition, other issues, such as lack of training and education, made it difficult to consider less strenuous work options. Individuals within the work organization often reported that collectively workers use strategies aimed to mitigate the effect of wear and tear by assigning different types of jobs to people of different ability levels.

These findings offer important insight into the ways that labor policies and administrative definitions have a direct impact on the bodies of workers. The provision of adequate health care benefits, retirement policies that take occupation into consideration, and career ladders that are accessible to more workers would all potentially offer opportunities for intervention in the ways that social inequalities produce disablement. However, it is also important to critically analyze how our theoretical models and practical definitions of disability also affect the trajectory of disablement processes. Our treatment of disability as a state of being, regardless of whether the emphasis is on the individual or the external environment, precludes looking at the processual nature of disablement. This tendency to view disability as a state of being renders invisible the structural processes involved in how people become 'disabled,' as well as their experiences of this 'becoming.'

A focus on disablement (rather than disability) offers a location in which to create a social justice model, in which we are cognizant theoretically of the experiential, material, and social constructionist realities of the process. This model would offer an extended description of disablement to include the ability to participate in activities outside of work, self-care, and daily life activities. Gaps between the ability of the individual and the social and physical environments in which these activities occur can have a distinct effect on quality of life. I would also argue that the definition of disablement should be extended to include the ability to participate in all of these activities without significant pain or discomfort. These interviews (along with other sociological research on pain – e.g. Bendelow & Williams, 1995) illustrate how pain can create barriers between individual abilities and environments. When we consider all of these issues in tandem, we can create a social model of disablement that equally values the heterogeneity of people with disabilities, and those in the process of acquiring disabilities.

Perhaps even more importantly, integrating the bio-medical, phenomenological, and social models of disablement and applying this new formulation would increase the likelihood that the general public would understand disablement through a different lens. This lens would hopefully dismantle some ableism by more fully placing the production of disablement in the social world, rather than individual bodies. This type of widespread understanding of disablement would additionally offer people the power of self-definition, and ultimately self-advocacy.

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CHAPTER 4

Corporeal Power: Theorizing the Body in the Social Structure

Amy Sorensen

Abstract The relationship between sociology and the body has been complex historically,

one in which the body has been largely relegated to a secondary object of analysis, or pushed to

the fringes of sociological inquiry. In this article, I offer a theoretical view of the body as a social

process, tied directly to the larger social structure and its system of complex inequalities through

the processes of material and symbolic production and consumption. In so doing, I bring together

the interdisciplinary strengths of scholarship in sociology and body studies, on the one hand, and,

on the other, more recent scholarship on intersectional inequalities.

Keywords: Social Theory, Feminist Theory, Body, Work, Health

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Corporeal Power: Theorizing the Body in the Social Structure

Introduction

The relationship between sociology and the body has been complex historically, one in which the body has been largely relegated to a secondary object of analysis, or pushed to the fringes of sociological inquiry. In this article, I argue that the body is tied directly to the larger social structure and its system of complex inequalities through the processes of material and symbolic production and consumption. In what might be considered a political economy of the body, I offer a theoretical exploration of the body as a social process. In so doing, I bring together the interdisciplinary strengths of scholarship in sociology and body studies, on the one hand, and more recent scholarship on intersectional inequalities, on the other.

Sociology and the Body

In the early years of sociology, in the process of differentiating itself from other sciences, sociologists primarily disassociated themselves from questions of the body, ultimately leaving the body to the realm of the biological sciences (Shilling, 2003). While this solidified the discipline as separate and distinct from existing sciences, it set a precedent for how sociology would treat the body in the future. As a result, and as Shilling (2003) has argued, the body has been an 'absent presence' in sociology. It cannot be said that sociology has failed to engage with the body at all. However, it has largely been a tertiary focus of theory and analysis.

Many important social theorists have engaged, at least in some ways, with the body.

Marx (1988/1844) and Engels (1892) viewed the body as the source of labor power as well as the outcome of labor processes. Elias (1994) placed the body within processes of civilization.

Goffman (1963) brought the body into his conceptualizations of social enactment and

stigmatization. Bourdieu (1984; 1986) discussed the classed body and physical capital. And Foucault (1978) engaged with the body as text, and in his discussion of the inscription of disciplinary practices on the surface of the body. However, none of these theorists placed the body as central to their theories.

In recent decades body studies has become more popular within many disciplines, primarily fueled by feminist scholarship (Shilling, 2003), and Sociology has been no exception. Beginning in the 1980's, the body began to gain some ground within the discipline (Shilling, 2003). This has paved the way for innovative spaces to engage the body within the discipline, including the journal, *Body and Society*, and specialty groups within professional organizations like the British Sociological Association, the American Sociological Association, and the International Sociological Association.

Even with the increased popularity of Sociology of the body, the body has largely been defined implicitly rather than explicitly (Berthelot, 1986). First, and at its most basic level, the body has been long understood as that which is contained within the biological entity we associate with the individual. However, this formulation of the body is insufficient, as it relegates the body to the realm of the biological, and inadequately recognizes the importance of group processes to the formation and maintenance of the body. Sociologically, the body is the possession most prized by the group, for which one is held most responsible and accountable. This definition becomes complicated by considering bodies which do not conform to a normative or ideal type. It is potentially insufficient to be defined as an organic entity, as non-organic matter can very often be a very real part of a body. The body includes the prosthetic leg, the leg which used to be, and the empty space between knee and floor.

The body is a social process through which the inequalities within the social system are made flesh. It is both defined and shaped within the context of broader group processes. The traditional ontological understanding of the body as a primarily biological entity operates to naturalize any inequalities inscribed upon, and given meaning through, the body (i.e. race, ethnicity, class, gender, or sexuality). However, the effects of processes of inequality on the body are not confined to the symbolic. Instead, the body – in form and function – is itself created and continually shaped by these processes. Thus, the outcomes of inequality can include bodily size, shape, comportment, disease, and disability.

Towards a Political Economy of the Body

Physical Labor

Historically, the body has been the primary form of production power. From hunting and gathering economies to the capitalist system, survival has depended upon the work performed by bodies. Early sociological discussions of the body at work, by Marx (1988/1844) and Engels (1892), explored the relationship between the body, labor power, capitalism, history, and spatial location. Marx (1988/1844) described the body as the location of labor power, the fundamental source of value from which capitalists could extract profit, and through which the proletariat would receive the means of survival. However, for Marx and Engels the body was not just the source of labor power, but also the outcome of the labor process. That is, they were interested in the ways in which the process of work shaped and altered the bodies of workers.

Harvey (2000) draws together the various strands of body theory found within the work of Marx and extends it to create a political economy of the body. According to Harvey (2000), the body can be described as an 'accumulation strategy,' a method of gaining capital. The

laboring body is ultimately a source of value. Drawing attention to the nature of the body, he asserts two propositions: the body is always unfinished, and always porous. Our understanding of the body as unfinished reflects the body as a project in modernity, as well as the constantly changing nature of the body. The body is always in flux and processual. As porous, the body has permeable boundaries. The body can be extended or diminished; it is affected by its environments (both social and physical). These characteristics place the body within historical, geographic, and social spatiality. He draws on Marx in his formulation of the body's relationship to the work process and capitalist system. Harvey (1982) states that: 'Capital circulates, as it were, through the body of the laborer as variable capital and thereby turns the laborer into a mere appendage of the circulation of capital itself.' Harvey (2000) also argues that capitalist production pushes the 'capacities and possibilities' of the working body 'in a variety of different and often contradictory directions.' These tensions are apparent at a number of levels. Capital requires educated laborers, who are then not allowed to think for themselves. Capital requires particular skills but rejects skills which can be monopolized. Capital requires healthy bodies, but often creates illness and injury. These tensions are exacerbated by the globalization of capitalism, with those in more precarious positions unable to negotiate any sort of stability through the use of social relationships or consumption practices. This does not simply reflect an individual's ability to purchase adequate resources or build a strong social network. It also applies to groups and nations which, lacking adequate access to resources (material and cultural), are unable to position themselves securely within the global economic system (and also find it impossible to disengage from this system).

However, viewing the worker as a generic category (i.e., as labor or labor power, without gender, age, or race), defining the worker purely from the perspective of capital, and the related

absence of subjectivity disembodies the field of work studies (Wolkowitz, 2006). Feminist scholars have, in a sense, re-embodied the worker by focusing on the intersections of gender, race, and age in the workplace. On her theorization of gendered organizations, Acker (1990) discusses the idea that the 'generic' worker actually comprises a particular working body, a male body. The organization of labor places particular expectations on the working body. These expectations include a lack of outside commitments and the ability to work particular schedules, all of which are associated with masculinity in our gendered system. Glenn (1998), among others, extended this theory to include the intersection of race and gender in the organization of work. Her scholarship highlights how the gendered system is also racialized such that historically, women of color have been working bodies in the service of others, often white women. Cockburn (1991) brings together multiple areas of inequality (gender, race, class, sexuality, and ability) in her exploration of power and domination in the workplace, and touches upon the importance of bodies and the interpretations of those bodies within the production process. Wolkowitz (2006) argues for a theoretical merger between the sociological areas of work and embodiment. Drawing on the work of corporeal feminists and political economists, she argues that it is important to create theory that highlights the relationship between the body and work.

The Body and Class

Harvey (2000) argues that Marx's description of class as a person's relationship to the means of production alone is inadequate, and he offers the following definition of class under capitalism: 'positionality in relation to capital circulation and accumulation' (pg. 102). He maintains that his conceptualization facilitates a more complex understanding of the 'internal contradictions of multiple positionalities within which human beings operate' (pg. 102). Here, Harvey's notion of

multiple positions includes those that an individual might inhabit within the social structure (including the processes of production and consumption). Thus, a person might simultaneously be a worker, a consumer, a saver or a spender, a 'bearer of culture', a property owner and so forth. However, the idea of multiple positionalities can also be applied at the meso- and macrolevels of analysis. Marx's analysis only allows for the exploration of one's position within the economic system. Harvey's (2000) account helps us gain a more nuanced understanding of class specifically, but can and should be extended to incorporate corporeal positionality within a system of complex inequalities. In other words, Harvey's explicit focus on class does not reflect these complex inequalities and the processes which create and maintain them.

Bourdieu's (2005) formulation of the classed body is a valuable contribution to this endeavor. According to Shilling (2003), Bourdieu views bodies as imprinted by class due to three primary factors: social location, habitus, and the development of taste. For Bourdieu (1984), social location refers to the ways lives are shaped and bodies are developed within the context of the external social and physical environment, including, but not limited to, the classed environment. Habitus, a set of dispositions which generate practice and perceptions, is contextualized by these social locations. Habitus ultimately is the embodiment of institutions, including the processes of inequality found within them. These embodied processes of inequality result in the development of taste, which is often related to preferences in symbolic and material consumption or participatory activity. Bourdieu's use of 'taste' would be incorporated into our current conceptualization of 'lifestyle.' However, Bourdieu viewed 'taste' as constrained by habitus and social location, rather than as an open choice. It is this embodiment of institutional inequalities that is of particular importance to the formulation at hand.

For Bourdieu, the body is more than its relationship to the buying and selling of labor power; it is a source of 'power, status, and distinctive symbolic forms... integral to the accumulation of various resources,' which can also be bought and sold in the production process (Shilling 2003). So, according to Bourdieu (1986) and Shilling (2003), the body is a source of capital not only through its ability to do work, but also in its mannerisms, abilities, and appearance. Bourdieu (1986) refers to this as physical capital. Physical capital is a form of cultural capital that is embodied through social practice or physical attribute. It can be used not only to 'purchase' other forms of cultural capital, but it sometimes can be used for direct economic gains. For Bourdieu, physical capital is inherently different from other types of capital (i.e. social, cultural, economic, and symbolic) in that it 1) cannot be inherited or transmitted directly; 2) is subjected to the capacities of the individual, and is therefore more transient; 3) it cannot be purchased; 4) its value is not static or universally applied; and 5) the 'exchange rate' is not guaranteed. These other forms of capital exhibit at least one of these characteristics.

The Body and Disciplinary Practices

Foucault's formulations of power, agency, and disciplinary practices further extend my notions concerning how to theorize the body in the social world. Because the body is formed in relationship to its positionality within the social structure, it is also subject to the power relationships found within that structure. Thus, we must examine how the body comes to be defined, how it is surveilled and disciplined, and how embodied agency and constraint are created within the social structure.

Foucault (1980) draws our attention to the fact that power is exercised in the ability to define and create knowledge. The production of knowledge is based within a system of inequality, in which some people have the power to define what constitutes knowledge (and

alternatively what does not), as well as to create that knowledge. Within Western society, particular institutions (and the people therein) have retained the power to participate in this production of knowledge. The medical establishment and its primary academic disciplines, the biological sciences, have enjoyed significant professional power and intellectual authority to define and construct the body. What people know about their own bodies has largely been filtered through a process of knowledge production that begins within the biological sciences, which tend to dismiss subjective knowledge about bodily processes.

Foucault engages the body in his description of surveillance and disciplinary practices.

According to Foucault (1978), social order depends on the creation of 'docile bodies.' Docile bodies are bodies which meet the normative requirements of the external social environment.

Failure to meet the standards of the docile body has particular social implications. While external surveillance and discipline are apparent in society, the ultimate form in our contemporary context is that of self-surveillance and self-discipline. Individual awareness of constant display results in practices which ultimately lead to the self-fashioned docile body.

Feminist scholars have utilized Foucault's description of surveillance and discipline to illustrate the ways in which women's bodies are more severely policed (both externally and internally), and held to stricter standards than are men's bodies (Bordo, 1999a). Intersecting inequalities are also an important component of the level of scrutiny applied to various types of bodies. The oppressive gaze of society is the gaze with the power to define normative, non-normative, and ideal bodies. The ideal body does not, for the most part, exist. It is, much like hegemonic masculinity, an ideal type against which bodies are measured and their values determined. The gaze which holds power is that of the youthful, white, heterosexual, ablebodied, middle-class, white male. Any deviation from this combination constitutes a non-docile

body, and receives a penalty in value and an increase in surveillance and disciplinary practice requirements.

According to Bordo's (1999a) feminist reading of Foucault, power in modernity can be described as 'non-authoritarian, non-conspiratorial, and non-orchestrated' (pg. 252). It is not possessed by people; instead it operates as dynamic de-centralized forces, which assume particular historical forms. Power is not a possession; it is instead an intricate system of inequality through which people are constituted and within which people are differentially positioned. It is also not seamless or unchanging; therefore positions for resistance can at times be negotiated. Systematic power acts upon the body, but bodies also have the ability to resist that force.

Ontology of the Body

The debate on the nature of the body is ongoing, and hotly contested. Often the lines are drawn at the boundaries of competing disciplines. The biological sciences have focused on the body as a material (and biological) reality. The social sciences have discussed the body as a social and cultural construction. Currently, however, there is an impetus towards interdisciplinary and multi-disciplinary scholarly work. Crossing these boundaries blurs the line between disciplines, and makes ontological hybridity an important project. It is no longer adequate to argue that the body is limited to any field of study, nor is it productive to separate the body into parts that each discipline may find acceptable. Instead, I argue that we must look at the body and its complexity as a whole entity. This means accepting that the nature of the body may not be reducible to merely material, experiential, or social construction. It also means that we can no longer avoid considering the important implications of the external environment, and the part it plays in the creation and maintenance of bodies. Thus, we must not only engage with what constitutes the

nature of the body, but also with the body's boundaries and the "external" elements implicated in the production of bodies.

In my current formulation of the body, I propose that the body is simultaneously material, social, and experiential, and most importantly, a social process. In order to fully consider the body within the social world, it is important to pay attention to the material realities of the body (including illness, pain, ability, strength, and so forth), the social construction of the body (who defines it, how it is interpreted, how the social world affects the form of the body), and the phenomenology of the body (how it is experienced, euphoria, abjection, and so forth).

In exploring the boundaries of the body, I draw from Harvey (2000) and argue that the body is unfinished and porous – always changing and contextual. It is dependent upon the technology available to it, and is, as Haraway (2006) so aptly described, a cyborg. The idea of the cyborg is related to the availability and use of technology to alter and extend the use and longevity of the body. Most of us are dependent upon advances in technology which ultimately become part of our bodies, or which alter the composition of our bodies (immunizations, antibiotics, insulin, and the use of wheelchairs, prosthetics, and eyeglasses). This illustrates a fluid boundary between individual bodies and the technological environment. Of course, the fluidity of the human body is not limited to its relationship to the technological environment. The porous and fluid nature of the body is present in relationship to multiple external environments, and I explore this further below.

Theorizing the Body: Hybridity and Extension

Combining the theoretical contributions of Marx, Harvey, Bourdieu, and Foucault leads me to the following formulation. The body is created through classed processes involving its relationship to the circulation and accumulation of capital. These classed bodies are accorded

physical capital, which solidifies their position within the production and consumption systems. Thus working-class bodies will differ, not only in form but also in physical capital, from other types of classed bodies (i.e. middle-class or upper-class bodies). Power is not evenly distributed and this distribution of power plays an important role in how knowledge is constructed. It also plays an integral part in the ways in which bodies are disciplined. It is also possible to exercise corporeal agency. In Foucault's (1980) description of power, he explains that power cannot exist without a plurality of resistances. In this formulation, power and resistance exhibit a symbiotic relationship. While class has an important relationship with bodies, other areas of intersecting inequalities must also be considered. All of the interrelated processes which are classed are also racialized, gendered, heterosexualized, and so forth. Rather than operating separately, these processes of inequality are simultaneous and intersecting, and cannot be disentangled from one another (Crenshaw, 1989). Again, we can assume that some areas of inequality are 'more' embodied than others, in that the body operates not only as the site at which the materialization of inequality occurs, but is also implicated as a mechanism through which inequality operates.

I propose that we can combine these ideas and extend them by theorizing the body as having a direct tie to the larger social structure through the processes of production and consumption, which are located within a larger system of complex, intersecting inequalities. In this formulation it is necessary to look at the processes of *material* consumption and production, as well as the intertwined processes of *symbolic* consumption and production. The relationship between the body and social structure varies by the body's social location, its historical and political position, and geographic location. Additionally, the body - as unfinished and porous - is always changing, through time and space. Thus, an account of the body within the processes of production and consumption must take all of these contexts into account. While this formulation

of the body in the social structure draws on the work of Harvey, Marx, Bourdieu, and Foucault, it extends each formulation in particular directions. In order to differentiate this particular formulation of the body from previous theorizations, I have chosen to utilize different terminology where my own conceptualizations diverge from the originals. One notable example is my use of the term corporeal power rather than physical capital (as used by Bourdieu) or labor power (as conceptualized by Marx). Thus I will be incorporating the ideas and terminology from other theorists that retain their original conceptualization as well as new terminology.

Material Consumption/Production and the Body

Material consumption and production processes are associated with the market system in which workers perform labor to 'earn' resource access. One person's production is another's consumption and vice versa, though there is no assumption of equality in ability to consume or produce. In the capitalist system, this generally means a worker performs labor for a wage, which the worker can then use to purchase resources. Other labor systems, outside of capitalist exchange, do exist. Barter systems are used in which one person's labor is traded for another person's labor. In more agrarian societies, laboring bodies may produce the resources themselves, without the intermediary monetary exchange. In the informal economy, unpaid labor often operates to make resources available to family units (i.e. the unpaid family labor performed primarily by women), but also may be a way for the unpaid laborer to gain access to resources (again, the unpaid family labor of women has often been the only way that women could gain access to important resources). These examples point to/indicate the different economic relations in which bodies are implicated.

Symbolic Consumption/Production Processes and the Body

Processes of symbolic consumption and production are more subtle to detect and difficult to measure. Symbolic production/consumption is intertwined with material processes. Symbolic capital includes embodied forms that are assigned a value within the larger social environment (i.e. skin color, body shape, comportment, etc), as well as symbolic artifacts (i.e. images in popular media) that are bought and sold within the material production/consumption processes. Additionally, products and services purchased within material production/consumption processes have a symbolic value attached to them, which is fluid and contextual. For instance, possessing a sports car increases an individual's cultural capital (separate from the increase in material capital value of this possession), but only in certain contexts. The same holds true for corporeal forms. Possessing particular corporeal forms may increase or decrease one's corporeal power depending on time, space, and social location.

Corporeal Power and Related Concepts

Corporeal Power

Corporeal power can be defined as what remains of the body's capability to consume and produce after accounting for its expenditures in production and consumption processes. Each of these concepts will be more fully elucidated in the following sections. Because the body is also tied directly to processes of complex inequalities, the resultant gendered, classed, and racialized body is imbued with a corresponding level of corporeal power.

Productive power. Productive power, put quite simply, is the body's ability to produce. Within the material production/consumption processes this is often the ability to do work that will result in gaining access to important resources. This includes not only work within the formal economic system, but also the informal economy. It additionally incorporates unpaid labor that is

involved with the acquisition of resources (e.g. the unpaid care labor of women that solidifies their own or their family's access to resources). Within the symbolic production/consumption process, this may be the power to allow the body to be symbolically consumed. While this type of power may not be empowering, as in the case of the sexual objectification of attractive women's bodies, it does result in a certain level of corporeal power. Symbolic productive power may also be the power to produce a distinct embodied cultural form that is valued within society (i.e. athleticism, attractiveness, or the mannerisms necessary to be a part of 'high' culture). Productive activity over time may lead to skill development, which - given adequate opportunity - can result in increased productive and consumptive power.

Consumptive power. Consumptive power is the body's ability to consume. In relationship to material consumption/production, this is the ability to consume goods and services. Conversely, within the symbolic consumption/production processes, it refers to the ability to consume symbolically. Thus the oppressive gaze of men often consumes the symbolic corporeal power of women, or the oppressive gaze of whiteness consumes the symbolic corporeal power of bodies of color. It is the power to 'other', exoticize, and eroticize. It is also the power to place value on particular symbolic forms.

Corporeal expenditure. There is also an expenditure inherent in these processes. Materially, this expenditure often comes in the form of using up bodily resources for production. This includes both the physical resources expended in manual labor, as well as the physical resources that are used in unpaid labor like childbirth or family care labor. It is also important to acknowledge that all labor does not result in an ability to acquire resources. In these cases, the corporeal expenditure is not met with a corresponding increase in consumptive power. For example, in previous eras women's unpaid labor (including child birth) was often the link between women

and the source of resources (e.g. her husband or family's resources from paid labor). However, it is also possible that this labor results solely in corporeal expenditure (with no increased access to resources). One example of this might be the single mother, whose labor expenditure for care of children actually results in no additional resources being made available, and may in fact create barriers to her access to important resources (e.g. paid labor or resources for her own consumption). Symbolically, the expenditure is often a loss of cultural value. In the process of symbolic consumption, very often that which is consumed also loses value in the process of its consumption. For instance, the symbolic consumption of women's bodies by the oppressive male gaze (Bartky, 1998) results in a decreased value of that body. In other words, even as the body produces a service, product, or symbol for consumption, it is simultaneously consumed by the consumer, and the process itself.

Types of Bodies

The body, within production/consumption processes, can be identified as a producer, a consumer, consumed, disposable, and/or a cannibal body. These need not be mutually exclusive. The body produces so that it may consume, but it is simultaneously consumed in the labor process. It is at once a consuming and a consumed body. Different bodies have different production and consumption capacities (in other words, bodies vary in their corporeal power). Those with more material and cultural resources, based on their social position, are capable of consuming adequate resources (i.e. products and services), thereby increasing their corporeal power. Those with fewer resources are less capable of consuming adequate resources. Thus, some bodies will be consumed at a higher rate than they can consume. This would lead to decreased corporeal power over time.

Consumer Bodies

Consumer bodies can be described as those that have more consumptive power than productive power. These are bodies that typically exhibit a higher level of power within the material and symbolic exchange processes. They are able to purchase and consume, often (but not always) adequately to maintain their corporeal power over time. For instance, a white male who has a high level of wealth and who expends very little energy within material production/consumption is primarily a consumer. However, a financially stable retired person might also qualify as a consumer body (as they have left the workforce, but maintain an ability to consume some resources, though not at the level available to the previous example). These are two very different consumer bodies.

Producer Bodies

Producer bodies are those that have more productive power than consumptive power. These are bodies that are able to produce, but not always at a high enough level to maintain adequate consumptive levels. These could be the bodies of working-class individuals, who through employment are able to maintain a high level of productivity, but who lack the pay-off in consumptive power that might be found in those who earn higher wages and benefits.

Consumed Bodies

Consumed bodies are those whose corporeal expenditure is greater than the sum of their consumptive and productive power. In other words, their bodily resources are being used up at a higher rate than they can produce or consume resources. These bodies may be either producer or consumer bodies. Often these bodies are those that are particularly vulnerable to the inequalities found in the larger social structure which limit their access to adequate productive and consumptive activities.

Disposable Bodies

Normative rates of production and consumption are situated within space and time, and are related to larger economic forces. Thus, different time periods and geographic locations will set forth different expected levels of material and symbolic production, consumption, and productive expenditure. There are different levels of 'acceptable' consumption in any society, ranging from subsistence to normative to superfluous levels of consumption. Bodies that are unable - or unwilling - to produce or consume at 'accepted' levels become disposable bodies, that is, they lack an ability to consume, produce, or be consumed symbolically or materially at an 'accepted' level. These bodies are stigmatized not only by their inability/unwillingness to produce, but in their inability/unwillingness to produce as a means to allow for normative consumption.

Disposable bodies are the bodies of people who are old and marked as vulnerable or frail; chronically unemployed or homeless; those with severe mental illness, cognitive delays or physically disabling conditions; and those who are incarcerated. Often these bodies are rendered invisible through processes of delegitimation.

Cannibal Bodies

Another category of body is that of the cannibal. Quite simply put, these are the bodies that have the power to consume other bodies directly - symbolically or materially. This category includes those who purchase sexual services and those that extract the labor power from the bodies of others.

Levels of Analysis

One of the most exciting components of this formulation of the body within the social structure is that it can be used at multiple levels of analysis. Because it positions the body within the larger external structure, it is equally applicable at the micro-, meso-, and macro-levels. At the micro-

level it can be applied to individual bodies, for instance, by looking at individuals, small groups, or short periods of time to evaluate corporeal power and outcomes like health measures. At the meso-level it can be applied to groups of bodies. This is especially useful in the examination of intersectional inequalities. It is possible to evaluate the corporeal power and corporeal typology of entire groups of people, bringing to light the ways that inequality is inscribed on bodies. One example of this type of analysis would be to evaluate how black males' corporeal power compares to that of white males overall. At the macro-level this theoretical view also allows us to look at the relationship between bodies and larger production/consumption trends over time and space, e.g., exploring how the corporeal power of entire nations is affected by processes of globalization.

Conclusion

In this theoretical imagining of the body, it is not my goal to imply that the body is everything, or to simply exchange the word body for the word human. My goal is to complicate the way that we define and interpret (corpo)reality. Within a dualistic system of knowledge the body has been relegated to that which is not the 'self', a mere container, biological entity, or inert and transparent communicator. This pervasive system has allowed us to largely dismiss the body within sociological inquiry, leaving it to the realm of the natural sciences. The body stands at the precipice of these dichotomous boundaries (body/mind; nature/culture; feeling/reason; black/white; male/female). Highlighting this location of the body allows us to more fully complicate these ideas, and create space for resistance to the system which perpetuates them.

It additionally is not my goal to offer an all-encompassing theoretical model that concretizes the body and its positionality within the social world. Instead, I hope that this formulation opens up further discussions about how we can best draw the body into a central

location within sociological inquiry. Our unwillingness to do so thus far has effectively relegated the body to the natural sciences and marked it as a negligible entity within the social world. This is reflective of a masculinist (and Eurocentric, ageist, ableist, racist, heterosexist, etc.) system of knowledge production that discounts the realities of the body as legitimate, ultimately perpetuating systems of complex inequalities. This discounting of the body also delegitimizes its position as the site of structural symbolic and material violence which is inherent in inequality.

It is my goal to provide a framework through which the body can be drawn more centrally into sociological inquiry. This allows us to explore more fully the ways that complex inequalities operate through the omnipresent processes of material and symbolic production and consumption, ultimately materializing on the body.

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CHAPTER 5

Conclusion

Social research into health can illuminate not only the processual nature of health, but also the mechanisms through which systems of complex inequalities operate in relationship to health processes. Using both quantitative and qualitative data, I explore these mechanisms by focusing primarily on white, working-class men in the context of the construction industry. In this chapter I revisit some of the findings from each of the chapters, and tie them into the overarching theme of this project. I consider how these findings speak to the existing literature and how my study can extend current knowledge.

The primary theoretical goal of my project has been to extend our understanding of the mechanisms through which social inequalities operate in relation to health and disablement processes by focusing on construction workers. This focus allows me to investigate connections among economics, work, multiple areas of inequality, and health. Each chapter in this dissertation is grounded in one of three overarching research questions. First, what is the relationship among race, class, gender, and occupation in the health of construction workers? Second, how does working-class masculinity and occupation affect patterns of disablement among construction workers, and how do they experience these processes? And finally, how can we theorize the body as a social process?

Chapter 2, "The Health of Construction Workers: Gender, Race, Class, and Occupational Determinants," focused on exploring the relationship among race, class, gender, and occupation and the health of construction workers. This chapter used both quantitative and qualitative data to elucidate these complex relationships. It attempted to determine whether or not there is a relationship between manual labor in the construction industry and health outcomes for men. In

addition, it explored the relationships among race, class, and gender and health by focusing on white, working-class masculinity. The findings of this chapter speak to multiple levels of knowledge production.

First, there are definitive implications for how we research men's health. Narratives of interviewees in this study illustrated that these men tend to compartmentalize their health, making a single question regarding self-defined health an insufficient way of gathering health information. For these men, the concept of health was separate and distinct from physical conditions like arthritis or chronic pain. It is important to know if men in general, or particular groups of men, understand health in this manner. The quantitative findings suggest that health is not a singular process, but multiple processes. Thus, inequalities operated differently within the scope of various health measures. And finally, respondents in the qualitative portion of this study had particular understandings of what constituted a workplace injury, and what did not. All of these findings should be investigated more fully to ensure that research into men's health is effectively measuring what we intend it to measure.

Second, the findings highlighted the multiple ways that occupation matters to men's health. Quantitative findings suggested that occupation has a separate and significant relationship to multiple health measures in addition to that associated with work-related accidents and injuries. Qualitative findings further showed that social relationships and position within the social structure have a relationship to health processes. This means that it is insufficient to focus only on workplace accidents and injuries in occupational health research. Instead, we must more fully evaluate the effect of multiple social processes associated with work.

Finally, this chapter shows relationships among race, class, and gender and the health processes of men. Not surprisingly, being working-class was associated with negative health

outcomes. However, race added an interesting dimension to these findings. Whites reported higher self-rated health, but also reported more physical and organic conditions. Qualitative findings suggested that part of this discrepancy may be due to white privilege, which may result in more access to important diagnostic and health tools. Working-class whites were much more likely than their counterparts to report a work-related injury or illness. This may be indicative of a mixture of class penalty in exposure and racial privilege in job security (and disproportionate employment in a once lucrative industry). These findings also suggested that job security along with adequate pay and benefits have important effects on men's health.

Chapter 3, "Wear and Tear: The Social Production of Disablement in Construction Workers," looked at how working-class masculinity and occupation affect patterns of disablement among construction workers, and how they experience these processes. Qualitative data drawn from interviews with workers illustrated the ways in which working-class masculinity is implicated in the process and social production of disablement. Working-class masculinity is associated with particular ideals, including hard, physical labor and physical fortitude, especially in relationship to provisioning. Participants in this study time and again described the physicality of their jobs and the wear and tear on their bodies associated with it. These narratives of wear and tear were indicative of disablement (as opposed to disability). All of the laboring participants reported conditions that could be considered disabilities based on the social model. However, none of them defined themselves as having a disability. Their understanding of disability was based on administrative definitions, which are largely tied to biomedical models. In this way, the implications of disciplinary power relations become concretized. In other words, the unequal distribution of discursive power favoring the biological sciences has affected how these participants understand their bodies. In addition, workers talked

about pain as the primary vehicle creating the gap between ability and requirements as well as barriers between ability and desired activities. This suggests that our conceptualization of disability needs to be extended to include disablement as a process rather than a state of being, the ability to perform necessary and *desired* activities without significant pain or discomfort.

Together these chapters speak to the primary theoretical goal of this project – to explore the mechanisms through which inequalities operate in relationship to health and disablement. This type of formulation also allows us to consider the ties between the social structure and the body more generally. Considering these findings together, health is illuminated as consisting of multiple processes of interaction between the social world and the biological body. Multiple processes are evident in findings that suggest different operational pathways for inequalities and their impact on various types of health. One example is the stark difference between how working in the construction industry affects disablement, and how it affects more organic health conditions, such as heart disease, operating as an enabler for the former and a buffer against the latter. These findings also highlight the importance of intersectional inequalities in health processes. For example, while being working-class may have a strong negative effect on health, race may complicate this relationship through access to services or occupational precariousness.

Disablement is one example of a health process. These findings indicated that the nature of disablement cannot be adequately theorized by conceptualizations that position it primarily as a state-of-being (whether this state is explained through bio-medical or social constructionist discourse). While social models of disability have offered important insights into the ways in which disability is socially-defined, they have offered less insight into the ways that the social structure is implicated in the production of disablement. This study highlighted the processual

nature of disability, and the ways that race, class, and gender, as well as larger economic and technological forces, are implicated in the production of disablement.

The power relations that influence the production of knowledge have an effect on which theoretical models are foundational to policy. For example, the historical relationship between the biological sciences and health research has led to health-related policies that are largely determined by bio-medical conceptualizations. This is evidenced in administrative definitions like those used by the Social Security Administration and Workers' Compensation programs. Policies often operate as the closest link between the everyday person and theoretical models. Thus, as in the case of the construction workers in this project, lay understanding of complex concepts may reflect the discourse with the most policy-power rather than alternate discourses which may offer more socially just models. This indicates a distinct need for increased visibility of social research on health and disability, as well as translation of this research into policy.

This study illustrated some of the important ties between the body and the social structure. These findings begin to illuminate some of the processes and mechanisms through which systems of intersecting inequalities shape the body. In addition, they draw attention to the ways in which historically-specific factors, such as technological innovation and economic trends, operate as sweeping forces on bodies. By focusing on these ties between the social structure and institutional inequalities and the body, we can begin to re-conceptualize the body itself as a social process, with ties to the complementary and intertwined processes of material and symbolic production and consumption. This conceptualization of the body allows us to draw it into a more central location within sociological inquiry without the sacrifice of various disciplinary assumptions of the body as material, social construction, or experience, while simultaneously retaining the integrity of the sociological lens.

These ideas are explicated in Chapter 4, "Corporeal Power: Theorizing the Body in the Social Structure." This chapter explored a sociological theorization of the body. Drawing upon and extending from the work of Marx, Harvey, Bourdieu, and Foucault, this chapter viewed the body as produced through classed processes (material and symbolic production and consumption) involving its relationship to the circulation and accumulation of capital. These classed bodies possess physical capital, which solidifies their position within these systems. The uneven distribution of power within the social structure plays a part in how the body is defined, how value is assigned to bodies, and the designation of disciplinary practices that bodies are subjected to. Throughout history, cultural scripts surrounding the body have been utilized as a tool to naturalize inequality. Sociology offers an important opportunity to engage with the body in a way that dismantles the essentialist views of the body that concretize inequality, focusing instead on the body as a social process - created, defined, altered, maintained, and destroyed by social forces. Ultimately, this theoretical view of the body, while intended only as a starting point, allows the body to retain its ontological complexity and draws these other disciplinary conceptualizations of the body into a sociological framework.

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APPENDIX A

Interview Questions

Basics

Tell me a little about yourself. (Probes: Age, name, where you live, your family, your background, education)

Occupation

Tell me about your job.

Describe a typical day on the job. (Probe: What activities are typical for you at work; what aspects of your job make it difficult to describe a typical day, what changes?) How long have you been doing this work?

I would like to understand what you do a little more clearly.

What are the physical aspects of your job?

What are the mental aspects of your job?

What are the emotional aspects of your job? (Probe: What kinds of feelings do you have at work? How free are you to express those feelings? How do you deal with the feelings of others?

What is your schedule like?

How stable is your job? (Probes: How likely are you to get laid off, fired, miss days due to lack of work or bad weather?)

How do you feel about the money you make at your job?

What is your income?

Do you have other sources of income?

What about benefits? Do you have health insurance? Retirement? Vacation or sick days? Other types of benefits?

Describe some of the people you work with. Tell me about working with them. What is your relationship like? What are your interactions like?

Describe some of the people you work for. Tell me about working for them. What is your relationship like? What are your interactions like?

Do these relationships affect the way that you do your work? (Probe: do you do things differently when one of these people is on the job? Do you work differently when no one is around?) What are your relationships like with other workers?

Workers who have worked at this job longer than you?

Workers who have worked at this job for a shorter time than you?

Do these relationships affect the way that you do your work?

Do you provide training or advice to newer employees? (What kind? How often?)

What kind of information did you get when you started working in this occupation?

How dangerous do you think your job is? (What things make it dangerous or safe?)

What kinds of safety rules are in place for your occupation?

How comfortable are you with the level of knowledge you have about safety rules and workplace protocols?

How do you feel about these rules?

Do you always follow these rules, or are there exceptions?

How do you feel about OSHA?

Do you have any experience with workman's compensation?

How well do you understand the workman's compensation process?

What are your thoughts about it?

What risks does your job have for illness? Injury? Long-term physical problems?

What does the word disability mean TO YOU?

What types of work have you done in the past, and how long did you participate in those occupations?

Health

How would you describe your health?

How would you define your physical condition right now?

Would you say that you have a disability? Why/Why not?

Do you have any health problems or symptoms?

How long have you had these problems?

Are these problems related to work?

Do these problems affect your work? (Probe: How do they affect your work? How serious is this for you?)

Do they affect other areas of your life? (Probe: How do they affect your personal life? How serious is this for you?)

How do you feel about these conditions? (Probe: Does this bother you? Make you angry or sad? How do you feel about the effects of these conditions)

Are there things that you cannot do for yourself because of these conditions? (Probe: what types of things? How do you manage this problem?)

Do your conditions stay the same, get worse, or get better?

What do you see your health being like in the future? (Probe: What about next year? What about 5 years from now?) What about 20 years from now?)

How will this relate to your work, if at all?

How will this relate to your personal and family life, if at all?

Have you ever known any other workers to get injured on the job?

Or become disabled?

Can you give me a couple of examples?

Does that affect how you look at/treat those workers?

What effect do you think your work has on your body? What part of the work has these effects? (i.e. is it the type of work, the risk for accidents, resources, etc).

Have you ever been injured on the job? (Probe: Describe what happened. Are there any lasting effects?)