An economic recession has gripped the global economy since December of 2007 causing growing unemployment and general experiences of insecurity across the United States and the broader global economy. Though there is some evidence that the economy may be improving, many continue to grapple with the challenges of the economic downturn and are adapting as best as possible to the continued economic uncertainties. In this study, I examine the impacts of both the overall economic insecurity accompanying the recent economic recession and actual job loss on daily time use. Specifically, I examine the effects of an insecure economic climate and being unemployed on 1) time spent sleeping, 2) time spent engaging in healthy behaviors, and 2) time spent with family members, in order to gain a greater understanding of the effects of uncertain economic climate on the lives of the US working-aged population. Drawing on the American Time Use Survey (ATUS) that can be linked to it, I draw on a subsample of respondents in the U.S. between the ages of 23 and 55 to examine these patterns.
Nature and Importance of Project
The "Great Recession" has gripped the American economy since the beginning of
2008, causing high levels of unemployment and experiences of economic insecurity
across both the United States and the broader global economy. Though there is
some evidence that the economy may be improving, many continue to grapple with
the challenges of this economic downturn and are adapting as best as possible to
continued economic uncertainties. Many have raised questions about how individuals
and families will fare, but there are few answers. My dissertation will develop a
greater understanding of the effect of recessionary times and being unemployed on
time spent engaging in healthy behaviors, sleeping, and with family members,
especially how social patterns might differ by gender, life stage, spouse’s
employment status, and education.

Past scholarship has investigated the impacts of recessions and being unemployed
for health and families but the results have been mixed (e.g. Fagin and Little 1984;
Larson, Wilson, and Beley 1994; Ruhm 2000). There is some evidence that being
unemployed during an economic recession is related to declines in health and family
outcomes (e.g. Fagin and Little 1984). Yet, recent research has shown improvements
in health outcomes in areas of high unemployment (Ruhm 2000). Beyond this lack of
consensus, much of this research has been unable to identify mechanisms linking the
economic climate to health and family outcomes or considered what recessions and
being unemployed mean for the current diverse US workforce. It is unclear how
becoming unemployed or an uncertain economic climate lead to differences in health
and family outcomes beyond reduced financial resources. My research hypothesizes
that how individuals use their time is influenced by the economic climate, which may
influence future health and family outcomes. In addition, I hypothesize that socio-
demographic characteristics affect these relationships. Past scholarship primarily
examined the effects of being unemployed for a white, male breadwinner with family
responsibilities (e.g. Fagin and Little 1984) but this does not represent the majority of
workers. As such it is unclear what the recession and being unemployed means for
today’s diverse workforce.

In my dissertation, I examine the impacts of the economic climate accompanying the
Great recession and job loss on time spent sleeping, in healthy behaviors, and with
family members, in order to gain a greater understanding of the effects of economic
uncertainty. Drawing on the 2003 to 2010 American Time Use Survey (ATUS)
collected by the US Bureau of Labor Statistics (BLS), I examine the time use patterns
of a sample of respondents in the United States between the ages of 23 and 55. I
address the following questions:
What are the effects of the Great Recession, living in states with high unemployment, being unemployed, and their combined effects on time spent sleeping, in healthy behaviors, and with family members on an average day? Do gender, life stage, education, or spouse’s employment status influence the relationships between a recessionary climate and being unemployed for time spent sleeping, in healthy behaviors, and with family members?

**Method of Analysis**
The ATUS is a nationally representative dataset that began in 2003 and has been conducted annually to capture the variation in how people spend their time. I examine data from all available years to compare different group’s time use patterns across their exposure to the Great Recession and being unemployed. I identify the recession in two ways. First, I compare respondents that are surveyed during the recession (2008-2010) to those surveyed before the recession (2003-2007). Second, I draw on state level unemployment rates from the BLS\(^1\) to assess state level variation. Lastly, I include individual employment status.

I capture sleep, health behaviors, and time with family in a number of ways. I examine differences in sleep across the total time spent sleeping, sleep disruptions, and reports of sleeplessness. I assess health behaviors through the amount of time spent exercising, in active travel (i.e. traveling on foot or by bike), and in self-care health activities (e.g. visiting the doctor when sick) as well as whether or not one reports eating breakfast. To assess the time with family, I investigate the time spent with all children, children under age 6, spouse or partner, spouse or partner and child(ren), parent(s), and any family members. Analyses examining time spent with family members are limited to respondents with those relationships (e.g. time spent with children is limited to respondents with children). I use various statistical methods appropriate for each dependent variable to examine how the economic climate and being unemployed are related to sleep, health, and family outcomes.

**Interdisciplinary Contributions**
In this study, I bring together the literatures on economic strain from public health, sociology, and public policy in ways that promote a greater understanding of being unemployed and economic recessions and their impact on health and families. Such analyses are important to better inform preventative health care (as a means to reduce healthcare costs) and family policy (to promote better child outcomes). In order to achieve this outcome, findings of studies such as this must be shared and engage with multiple audiences in order to speak with the entire population of individuals and agencies interested in health, family, and economic climate. I have made it a priority to present my work in multiple interdisciplinary venues including the Minnesota Population Center, the University of Minnesota Doctoral Research Showcase, and the annual meeting for the Population Association of America.

**Work Plan**
This award would make it possible for me to focus my attention on writing a strong and thoughtfully developed dissertation by allowing me to forgo other summer employment options and to work exclusively on it. Below is my intended plan for completion:

\(^1\) Unfortunately, ATUS does not have more specific information on location.
<table>
<thead>
<tr>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
<tr>
<td>Apr</td>
<td>May</td>
</tr>
<tr>
<td>Consortium Funding</td>
<td>-Write second paper -Finalize third paper analyses</td>
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References

Biography
Rachelle Hill is a Ph.D. candidate in the Department of Sociology. Hill’s goal following her undergraduate degree was to work in the nonprofit sector and to make substantive changes in the resources and social position of the disadvantaged. After spending a number of years working for nonprofits both in Washington, D.C. and Nashville, TN, she quickly became aware of the disconnect between academic research and the provision of social services. Being unable to identify best practices, social service agencies depended on their own innovation and will to help others. Hill decided to return to graduate school to develop the skills and knowledge necessary to help bridge the gap between the scholars identifying effective social supports and the organizations that aim to serve disadvantaged populations. Having focused her attention on disparities in health and health behaviors, Hill aims to secure a post doctoral training position that will provide more specific training on health and health interventions after defending her dissertation.
### Project Title: Tim in the "Great Recession": The Impact of the 2008/2009 Economic Recession and Unemployment on Time Spent in Healthy Behaviors and with Family Members

<table>
<thead>
<tr>
<th>Personnel costs</th>
<th>Description &amp; justification</th>
<th>Requested funding</th>
<th>Matching/other funding</th>
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<td>$4,661.80</td>
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<td>2 Other personnel</td>
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</tr>
<tr>
<td>3 Other personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Other personnel</td>
<td></td>
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</tbody>
</table>

5 **Personnel Subtotal**

| 6 Speaker Honoraria | Number of speakers and amount of honoraria | $0.00 | $0.00 | $0.00 |
| 7 Supplies & Services | Identify and explain use. | $0.00 | $0.00 | $0.00 |
| 8 Equipment | Identify and explain use. | $0.00 | $0.00 | $0.00 |
| 9 Travel | | $0.00 | $0.00 | $0.00 |

10 **Subtotal research supplies, equipment, travel, other**

| 11 TOTAL BUDGET | $4,661.80 | $0.00 | $0.00 |

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1. Stipend justification. You must justify the amount of stipend you are requesting by identifying the number of hours you plan to work on the project and the hourly wage used for research assistants in your department. Include fringe benefits.

2-4. Identify all other personnel to be paid from this grant including interpreters, travel guides, etc. and justify their salary by identifying the number of hours they will work and the hourly wage. What is the hourly wage based on?

6. For colloquia, identify the number of speakers and the amount of honoraria you will provide.

7. Supplies and services. List out all supplies and their estimated costs. Explain in line 7 or in the body of your proposal what the supplies will be used for.

8. Equipment costs are allowable only if the justification clearly shows that the equipment is necessary for the project. Include explanation of what will happen to equipment at completion of project.

9. Travel costs must include a description of the purpose of the travel, start and stop dates of travel, transportation costs, housing costs, and allowable per diem (use University rates found at http://travel/umn.edu).
The IRB: Human Subjects Committee determined that the referenced study is exempt from review under federal guidelines 45 CFR Part 46.101(b) 
category #4 EXISTING DATA; RECORDS REVIEW; PATHOLOGICAL SPECIMENS.

Study Number: 0911E74472

Principal Investigator: Rachelle Hill

Title(s):
Being Indispensable: The Impact of the 2008/2009 Economic Recession on Time at Work and in the Family

This e-mail confirmation is your official University of Minnesota RSPP notification of exemption from full committee review. You will not receive a hard 
copy or letter. This secure electronic notification between password protected authentications has been deemed by the University of Minnesota to constitute a legal 
signature.

The study number above is assigned to your research. That number and the title of your study must be used in all communication with the IRB office.

If you requested a waiver of HIPAA Authorization and received this e-mail, the waiver was granted. Please note that under a waiver of the HIPAA 
Authorization, the HIPAA regulation [164.528] states that the subject has the right to request and receive an accounting of Disclosures of PHI made by 
the covered entity in the six years prior to the date on which the accounting is requested.

If you are accessing a limited Data Set and received this email, receipt of the Data Use Agreement is acknowledged. This exemption is valid for five years from the date of this correspondence and will be filed inactive at that time. You will receive a notification prior to 
inactivation. If this research will extend beyond five years, you must submit a new application to the IRB before the study?s expiration date.

Upon receipt of this email, you may begin your research. If you have questions, please call the IRB office at (612) 626-5654.

You may go to the View Completed section of eResearch Central at http://eresearch.umn.edu/ to view further details on your study.

The IRB wishes you success with this research.