

# WOMEN'S WORK: THE HOME, THE WORKPLACE, AND THE SPACES BETWEEN

**Perry Carter**

Department of Economics and Geography  
Texas Tech University  
Lubbock, TX 79409-1014  
E-mail: perry.carter@ttu.edu

**David Butler**

International Development Program  
Department of Political Science, International Development, and International Affairs  
The University of Southern Mississippi  
Hattiesburg, MS 39406-5022  
E-mail: David.Butler@usm.edu

## ABSTRACT

This paper explores women's travel behaviors during their commutes from home to work. The type of women's work being examined in this study is the rapidly developing customer information services industry – call centers. As in most of the industry, the call centers in this study employ a largely female workforce. The underlying assumption of this analysis is that an investigation of the routes linking female call center agents' workplaces to their homes will provide information on women's lives in both sites. The study location is Albuquerque, New Mexico, while the data for this study comes from a survey of call center employees and from interviews with call center managers.

**Key words:** gender, commuting, labor, call centers

## **Introduction**

Before the rise of large scale industrialization home and workplace were one and the same. Most families lived on farms or in rooms to the rear or over the establishments they operated (Neth, 1994, Hall et al., 1986). Other than to nearby fields there was almost no commuting to work. The domestic sphere and the sphere of the formal economy almost completely overlapped. Industrialization distanced the home from the place of paid labor. The workplace, the home, and the routes linking them constitute the geographies of the modern economy (England 1991; Bauder, 2001; Bloomfield and Harris, 1997). For women, even more so than industrialization, the rise of the service sector dominated economy widened the space between domestic labor in the home and wage labor in the formal economy. Sixty years ago few women spanned this space, today the circuit from home to work and back is a given for most women.

This study explores the trips linking women's homes to their jobs. It examines the commutes from home to work of women employed in a female dominated service sector occupation – call center agent. This study presumes that these women's varying travel distances and times to work reflect the gendered labor and gendered roles they perform inside and outside of the home. What follows is a probing of the distances and durations of these commutes.

The study begins with a review of the gendered journey to work literature and a general description of call centers and call center agents. This is followed by a description of the Albuquerque, New Mexico labor market, the study site for this research. Tying into this description is an account of how the data for this study was gathered. The exploration of gendered commuting begins with a detailed examination of female agents travel times

and distances to work. The paper concludes with a discussion of what these findings tell us about these women's work lives and home lives.

## **Previous Studies on Gendered Work**

Empirical feminist researchers have been drawn to the juncture that binds home to workplace (Cope, 1998; England, 1993; Hanson and Pratt, 1988a, 1988b, 1991, 1992, 1995; Mattingly, 1999; McLafferty and Preston, 1991, 1997; Johnston-Anumonwo, 1997; Dyck, 1989, 1990; Gilbert, 1998; Kwan, 1999a, 1999b). This interest is due in large part because commuting explicitly links women's work in the informal economy (the home) to their work in the formal economy (wage labor) (Sayer, 1997; Massey, 1997; Gibson-Graham, 1996; Law, 1999). The spatial entrapment thesis is one of the early theorizations to emerge from this body of work. It puts forth that the demands of wage labor and the demands of the home collide when women, bound to their roles in the home, are hobbled in their physical and economic mobility to and within the workplace (Pickup, 1984).

Much work has gone into attempting to validate the spatial entrapment thesis. In one of the earlier studies on the subject, Hanson and Johnston investigated the trip distances of Baltimore commuters (1985). Not only did they examine the travel behaviors of men and women, but they also examined the travel behaviors of men and women situated within various household contexts – single/married; without children/with various numbers of children; and with children of various ages. They found that in the aggregate men traveled further to work than women, single men and single women traveled approximately the same distance to work, and, surprisingly, there was no significant difference in the travel behaviors of married mothers and married non-mothers. While male workers'

longer travel distances support the spatial entrapment thesis, the lack of a difference between women with children and those without suggests that the spatial entrapment thesis is not as elegant a theorization as originally thought.

The findings of Rutherford's and Wekerle's analysis of household survey data from suburban Toronto intimate an explanation as to why Hanson and Johnston failed to discover a significant difference between the travel behaviors of female spouses with children and those without: Most female dominated occupations are essentially the same (1988). They are the same in that wages vary little between them. Consequently, why would a woman travel far from her home to work at a job that pays her approximately the same wage as another closer to home? Their study implies a gendered occupational structure, which, in financial terms, limit women's sets of distinct employment alternatives.

The work of McLafferty and Preston injected another element of complexity into the study of gendered commuting (1991). Using the New York Consolidated Metropolitan Statistical Area as a case site, MacLafferty and Preston employed US Census data to "investigate whether gender differences in commuting exist for the two main minority groups in the New York area, blacks and Hispanics" (1991: 1). They found that not only do Blacks and Hispanics commute longer than their racial and ethnic male counterparts, but they also have longer commutes than both White female and male workers. Their findings denote the non-universality of womanhood and further highlight the simplicity of the spatial entrapment thesis.

The two most comprehensive studies of gender, work, and commuting are those published in the mid-1990s by England (1993), and Hanson and Pratt (1995). They are comprehensive in that they both employ

multiple sets of data and multiple methods to try to arrive at an explanation for gendered differences in travel to work behavior. In a direct testing of the spatial entrapment thesis, England chose suburban Columbus, Ohio as a study site. She gathered and analyzed data from interviews with personnel managers and clerical workers, and used business directory data to compare travel behavior between married men, married women, and single women. The results from England's study ran "counter to the theoretically and intuitively appealing entrapment thesis" (1993: 236). She came to this conclusion when her interviews with employers failed to develop a link between firm location choice and gendered labor pools, when her interviews with clerical workers revealed that married women – directly contradicting the entrapment thesis – traveled further to work than single women, and when her quantitative analysis of married women's commuting behaviors revealed that they were more similar to their husbands than to single women commuters.

Building on England's research, Hanson's and Pratt's study of gender, work, and commuting in Worcester, Massachusetts, also takes a triangulated approach by using multiple sources of data and various methods of analysis (1994, 1995). They employed US Census journey-to-work data, a survey of workers in 620 households, and interviews with local employers and workers. They uncovered strong interdependencies between workplaces and residents for certain groups of female workers. Interdependencies between female segregated occupations and spatially female concentrated employment in which "well-educated, part-time employed mothers of young children" comprise the primary employment pool (1995: 222). They also found that working women encumbered with household responsibilities tend to work closer to their homes than female workers

with fewer household responsibilities (1995: 223).

The findings of these and other studies reveal the process or processes underlying gendered home to work and back travel behavior to be persistently recondite. The only statement, which can be made with any conviction, is that certain women spent less time in transit to work than certain other women. More specifically, White, middle-class, married, working mothers tend to work closer to their homes than their non-White, non-middle-class, non-married, non-female counterparts. Perhaps the greatest contributions these studies make is in their paring down of the spatial entrapment thesis. These studies also suggest that perhaps instead of trying to valid or invalid a particular theory that a more open-ended, exploratory approach is a more appropriate approach. This body of work reveals that there is a great deal that is not known about the relationship between women's work in the home and their work for wages. The ensuing analysis scrutinizes the link between women's homes and their places of employment.

### Women's Work: Center Agents

Call center agents engage in emotional labor. Hochschild in her seminal work *The Managed Heart* defines emotional labor as the "management of feelings to create a publicly observable facial and bodily display" (1983: 7). However in terms of call center labor, labor in which bodies are not displayed but suggested via disembodied voices, James' more general definition is most appropriate: "labor involved in dealing with other peoples' feelings.... a core component... [of which is] the management of feelings within social processes" (1989: 21). James goes on to assert that emotional labor has been associated with women whereas the repression of emotions while engaged in labor has distinguished the work of men

(1989: 22-25). Leidner in her examination of interactive service workers note how the gender social expectations associated with emotional labor acts to constrain workers gender identities:

*In order to construct routines for interactions, especially scripts, employers make many assumptions about what customers like, what motivates them, and what they consider normal interactive behavior. Some of the assumptions employers make concern how men and women should behave. Once these assumptions about proper gender behavior are built into workers' routines, service recipients may have to accept them in order to fit smoothly in the service interaction.* (1991: 156)

The call center industry quickly arrived at the realization that women sell. The industry has transformed performances of femininity and female sexuality into commodities that are sold alone side airline tickets, hotel reservations, and timeshares (Foreseth, 2005). In some cases female agents are encourage to flirt with clients, but more often women are expected to utilize their inherent 'soft skills' (their caring skills) to persuade customers to either buy a product or service, or assist customers with their after purchase inquiries (Brannan, 2005; Fernandez et. al., 2005: 894-895). Seventy percent of residential call center (centers serving households) agents are women, while only 47 percent of large business call center (centers serving firms) agents are women (Batt. et. al, 2004: 17).

Call centers have been described as 'white collar sweatshops', 'electronic Panopticons', and 'dark satanic mills' (Taylor and Bain, 1999; Fernie and Metcalf, 1998; Richardson et. al., 2000; Kinnie et. al., 2000, Brannan, 2005). While hyperbolic these descriptions reflect the pressure-filled, repetitive, low wage environment that many call center agents, or 'customer service representatives'

as they are commonly known in the industry, work (Belt et. al, 2002: 28-29). Call centers come in two forms: inbound (e.g. telephone reservations, support services) and outbound (e.g. telemarketers). There are approximately 115,000 call centers in the United States employing more than 5 million people (Feinberg et. al., 2000: 132; McDonald, 2000). Though not an “official” government classified industry until 1973, call center activities generate more than \$800 billion in revenue a year in the United States (Richardson et. al., 2000: 360; Prabhaker et. al., 1997: 223).

This industry would be inconceivable without the interdigitation of telephone and computer technology. Call centers are hives of mostly female workers electronically plugged into computer and phone systems that aids them in their performance of white-collar assembly line labor – they are cyborgian fusions of humans and machines. (Mullings, 1999: 298-299; Bonds, 2006: 31-34). Most call center agents’ work spaces are small cubicles packed into large warehouse type spaces. The agents wear telephone headsets and sit in front of computer screens from which they recite industry developed scripts to potential customers (Brannan, 2005). They receive and keypunch customers’ information into computer databases. While this is taking place, center supervisors electronically monitor agents’ performances (Holman et. al., 2002). Supervisors randomly listen in on the agents’ conversations with customers to check their tone of voice, helpfulness, enthusiasm, and the speed with which agents get through calls (Winiecki, 2007). Most calls at outbound centers are computer automatically ‘power dialed’ allowing an agent to make as many as 80 calls in the span of an hour (Taylor and Bain, 1999: 108). Many of these calls end when the agent is hung-up on, while in a significant number of other telephone exchanges agents are verbally abused or sexually harassed<sup>5</sup>.

The rapid growth of call centers in Europe and North America over the past two decades has been driven by the cost savings that accrue from economies of scale (Belt et. al., 2002: 28; Bishop et. al. 2003). Instead of each unit of a firm engaging in customer communication, changes in telecommunication and computer technology enable functions to be combined and located away from the actual site of production (Mullings, 1999: 295; Glasmeier and Borchard, 1989; Warf, 1989, 1993; Howland, 1993). Additionally, many firms now outsource this customer communication functions to third-party call centers (Richardson et. al., 2000: 361). Consequently, there is less of a need for skilled high-cost employees because the technology allows for consolidation and footlooseness. This footlooseness enables call centers to locate almost anywhere and because the only essential requirements for employment are an ability to speak English relatively clearly and keyboard skills, call centers seek out low cost labor locations (Cowie, 2007; Friginal, 2007). This is why New Mexico, a state with the sixth lowest per capita income in the U.S. in the year 2000 (\$17,261), has witnessed a rapid growth in call centers.

### **Albuquerque**

Albuquerque, New Mexico was chosen as a study site because: 1) It is home to a small but expanding concentration of call centers, 2) the Southwest is a growth region for call centers largely due to its abundant supply of low cost labor (Figure 1), and 3) Albuquerque’s call center alliance, an informal group consisting of call center directors, serendipitously presented an opportunity to access the call centers used in this study.

Albuquerque, New Mexico’s largest city, has a population of approximately 472,000. The region has a median household income of \$39,100, yet, as in most other parts of the

nation, the average female worker in Albuquerque earns only 68 percent of what her average male counterpart earns (U.S. Census, 2000). This discrepancy is principally due to the gendered nature of certain occupations (Cohen and Huffman, 2003). An example of this occupational ordering is displayed in the 2005 American Community Survey of the U.S. Census Bureau for Albuquerque. Workers in the professional, scientific, and technical services industries (rational/reasoning occupations) have average annual incomes of more than \$45,700; while those working in educational, health care and social assistance services (caring/emotional occupations) earn approximately \$27,900 a year. In Albuquerque 60 percent of professional, scientific and technical services employees are male and these men on average earn \$22,700 more than women in these fields. Sixty-four percent of educational, health, and social assistance

services workers in the region are female, yet men working in this female dominated profession earn \$4,500 more than their female co-workers (\$31,400 versus \$26,900).

### **The Politics of Data Gathering**

One manager informed us that “[His center] get[s] a lot of married people, single mothers with children, families. There is a whole new breed out here, generally speaking, married, settled down.” Another joked that an ideal employee was, “[A] beautiful woman obviously with bilingual skills, [and] spirit.” These quotes reveal the type of labor force that call centers generally seek out – women with soft skills (Belt et. al., 2000; 2002).

To understand this female dominated industry and its spatial relationship to its workers’ residences, a survey of call center



**Figure 1:** Albuquerque call center advertising for agents.

agents was conducted. The Albuquerque call center alliance acted as a means of ingress to individual call centers and their directors. As an incentive to participate in this study, call center directors were offered a summary of the results from the findings of the survey. Of the thirty call center directors contacted, six granted permission (20% response rate) for on-site surveys (see note 2).

A few of the directors in the alliance were reluctant to grant access to their employees. The reasons given included: 1) they did not have the time, 2) they had to protect their employees, 3) the survey information would not tell them anything that “they did not already know,” 4) they were the leading call center in the region and if information from the study was shared with other centers, they could lose their competitive advantage, and 5) in one case a director was on vacation at the time leaving no subordinate authorized to grant permission. Of the six centers that granted access, several wanted to preview the questionnaire to “protect their employees.” After previewing the questionnaire, two of the directors objected to three of the questions, the first two being: “Have you ever been a member of a labor union?” and “Has anyone ever approached you about unionizing?” These directors stated that any question regarding labor unions had to be removed before access to their employees would be granted. Similarly, England experienced this same sensitivity by management to issues surrounding unions and unionization in her study of clerical workers (1993: 231). The third question that some directors found objectionable regarded race/ethnicity. One center director stated that the question had to be made optional and printed in bold. Because female travel behavior was the focus of this study, we acquiesced to the directors’ requests and made the necessary modifications.

The inspiration for much of the questionnaire came from the back office, call

center, and spatial division of labor literatures. Key questions included: distance traveled to work, time spent in transit to work, sex, age, marital status, wage, household income, job tenure, and number of children in the household. Both travel time and travel distances were chosen as dependent variables in this study. The survey was conducted during seven days in June of 2000. Out of the approximately 500 employees at the six centers, 365 completed the survey, a response rate of 73 percent. Of the 365 questionnaires completed, 334 were usable<sup>6</sup>. Only 77 of the respondents were male. Males working in female dominate occupations are currently a topic of increasing interest, but because female travel behavior is the focus of this research the 77 male respondents were dropped from the analysis (Bird, 2003; Tichenor, 1999, 2005; Williams, 2004). The high level of response was due in large measure to center directors strongly encouraged employee participation. Similarly, most directors instructed their supervisors to allow employees time away from the phones in rotating shifts to take part in the survey.

### **Women at Work, on the Road, and at Home**

As the work of McLafferty and Preston demonstrated, it should not be assumed that all groups of women will exhibit the same travel behaviors (1991). Women differ in the social situations in which they choose and in which they find themselves. Table 1 shows how the female agents differ in their work and home lives. Most of these women earn around \$11 an hour with hourly wages increasing with job tenure. Only a few of these agents have been employed at their call centers for more than 50 months (more than four years). Most of these workers range in age from their mid-30's to their early-40s. Less than half are married (44.7%), while more than half (55.2%) are parents. The workers at these centers are

equally divided among White and Hispanic women. This is a low-wage workforce composed primarily of middle-aged women many of whom are either single parents or married without children. The question that will be explored is how these differences between groups of women affect their travel to work behavior. Figure 2 provides some clues.

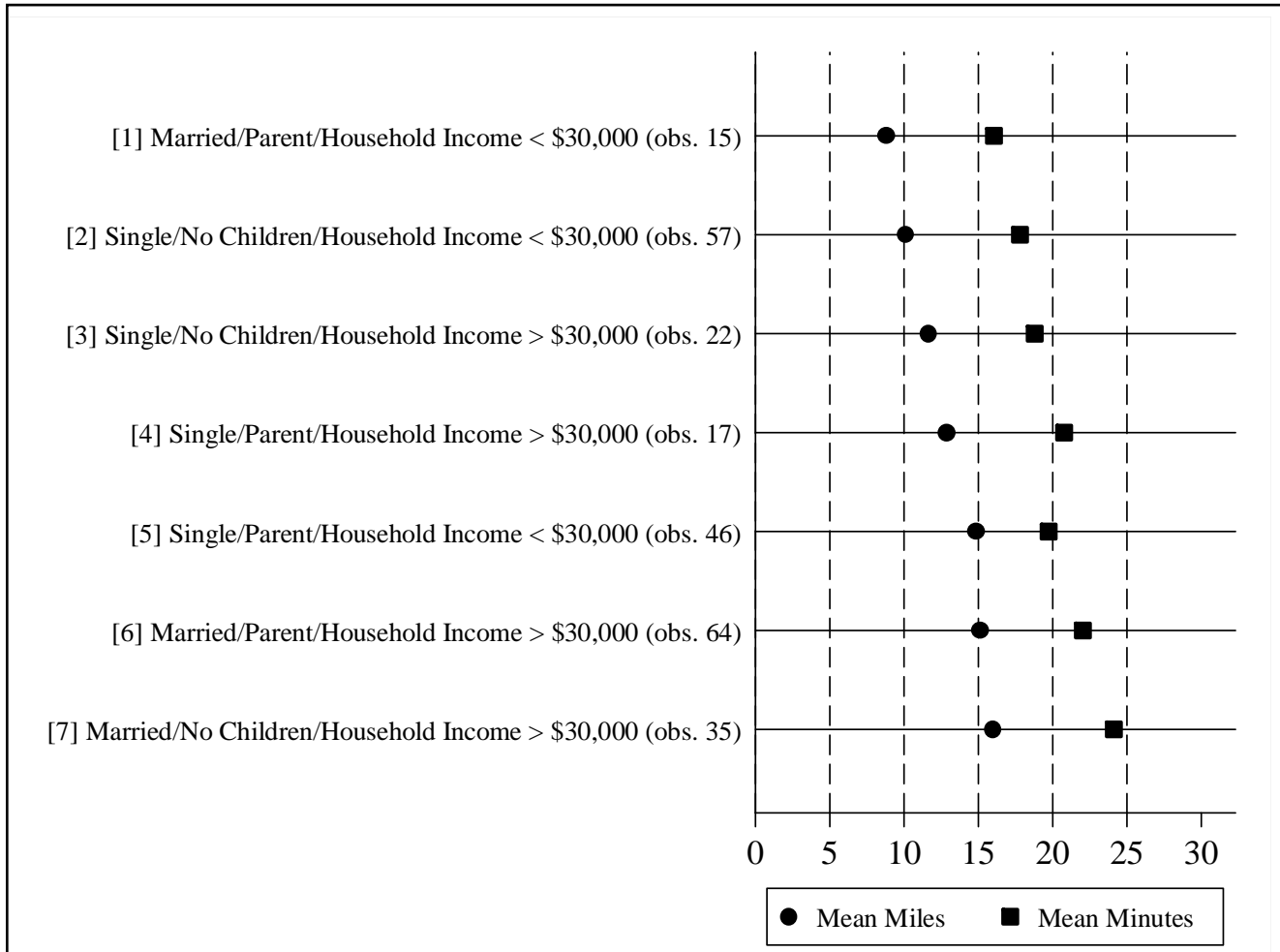
Figure 2 displays travel distances and travel times for seven groupings of female call center agents. The times and distances suggest that household income and agent's marital status seem to be the greatest

determinants of travel time and distance to work. The two groups of women who travel the farthest and longest to work (groups 6 and 7) have in common marriage and households of more than \$30,000 a year. Of course there is a link between marriage and household income – husband's salary. The correlation between marital status and household income is 0.799. What is striking about this distribution of agents is that married agents whose incomes combined with their husbands' still do not reach the \$30,000 a year level (group 3), travel the shortest distances and times to work of any of the other groups. The four remaining

| Female workers' household status   |                 | Wage<br>(per hour) | Number of<br>children | Age       | Job<br>tenure<br>(months) | Ethnicity    |          |       |
|--|-----------------|--------------------|-----------------------|-----------|---------------------------|--------------|----------|-------|
|  |                 |                    |                       |           |                           | White        | Hispanic | Other |
| Single / no children / household income below \$30,000<br>(number = 57)  | 25th percentile | \$8.83             | 0                     | 24        | 4.5                       |              |          |       |
|  | <b>Median</b>   | <b>\$9.98</b>      | <b>0</b>              | <b>30</b> | <b>18.0</b>               |              |          |       |
|  | 75th percentile | \$11.15            | 0                     | 48        | 52.5                      |              |          |       |
|  | Percent         |                    |                       |           |                           | 44.6         | 41.1     | 14.3  |
| Single / no children / household income above \$30,000<br>(number = 22)  | 25th percentile | \$8.84             | 0                     | 29        | 11.5                      |              |          |       |
|  | <b>Median</b>   | <b>\$13.00</b>     | <b>0</b>              | <b>41</b> | <b>60.0</b>               |              |          |       |
|  | 75th percentile | \$16.50            | 0                     | 58        | 125.8                     |              |          |       |
|  | Percent         |                    |                       |           |                           | 31.8         | 54.5     | 13.6  |
| Single / parent / household income below \$30,000<br>(number = 46)       | 25th percentile | \$8.79             | 1                     | 31        | 7.0                       |              |          |       |
|  | <b>Median</b>   | <b>\$10.87</b>     | <b>2</b>              | <b>38</b> | <b>29.5</b>               |              |          |       |
|  | 75th percentile | \$11.35            | 3                     | 47        | 57.8                      |              |          |       |
|  | Percent         |                    |                       |           |                           | 36.4         | 45.5     | 18.2  |
| Single / parent / household income above \$30,000<br>(number = 17)       | 25th percentile | \$11.00            | 1                     | 30        | 44.5                      |              |          |       |
|  | <b>Median</b>   | <b>\$12.91</b>     | <b>2</b>              | <b>37</b> | <b>54.0</b>               |              |          |       |
|  | 75th percentile | \$15.94            | 2                     | 47        | 83.5                      |              |          |       |
|  | Percent         |                    |                       |           |                           | 37.5         | 43.8     | 18.8  |
| Married / no children / household income below \$30,000<br>(number = 1)  | 25th percentile | \$8.05             | 0                     | 25        | 5.0                       |              |          |       |
|  | <b>Median</b>   | <b>\$8.05</b>      | <b>0</b>              | <b>25</b> | <b>5.0</b>                |              |          |       |
|  | 75th percentile | \$8.05             | 0                     | 25        | 5.0                       |              |          |       |
|  | Percent         |                    |                       |           |                           | not reported |          |       |
| Married / no children / household income above \$30,000<br>(number = 35) | 25th percentile | \$9.49             | 0                     | 29        | 9.0                       |              |          |       |
|  | <b>Median</b>   | <b>\$10.94</b>     | <b>0</b>              | <b>40</b> | <b>44.0</b>               |              |          |       |
|  | 75th percentile | \$12.98            | 0                     | 51        | 84.0                      |              |          |       |
|  | Percent         |                    |                       |           |                           | 52.9         | 35.3     | 11.8  |
| Married / parent / household income below \$30,000<br>(number = 15)      | 25th percentile | \$8.35             | 2                     | 27        | 6.0                       |              |          |       |
|  | <b>Median</b>   | <b>\$9.98</b>      | <b>2</b>              | <b>36</b> | <b>20.0</b>               |              |          |       |
|  | 75th percentile | \$11.14            | 3                     | 47        | 50.0                      |              |          |       |
|  | Percent         |                    |                       |           |                           | 20.0         | 66.7     | 13.3  |
| Married / parent / household income above \$30,000<br>(number = 64)      | 25th percentile | \$8.83             | 1                     | 33        | 12.3                      |              |          |       |
|  | <b>Median</b>   | <b>\$11.46</b>     | <b>2</b>              | <b>41</b> | <b>47.5</b>               |              |          |       |
|  | 75th percentile | \$12.92            | 3                     | 49        | 86.5                      |              |          |       |
|  | Percent         |                    |                       |           |                           | 45.9         | 45.9     | 8.2   |

**Table 1:** Demographic data for surveyed female call center agents in the Albuquerque MSA





**Figure 2:** Comparison of female call center employees' mobility by family type and household income.

groups of agents (groups 2, 3, 4, and 5) are composed entirely of single women. These single agents travel on average 13 miles, one-way, to their jobs and their commutes take from around 17 to 20 minutes to complete. Also single mothers' commuter slightly longer and slightly farther than single women without children. From this data it would appear that marriage and household income play a leading role in determining agents' travel behaviors. Table 3 examines this role in more depth.

Tables 2(a) and 2(b) show the results of two regression analyses where miles to work and minutes to work are, respectively, the dependent variables. The explanatory

variables included in these models are hourly wage, number of children, age, months on the job, and marital status. Household income is not included in either of these models because of its high correlation with marital status. Thus marital status is a measure of both family type and household financial resources. Also included in these models is an interaction term measuring the effect of being married with children. Because interaction terms tend to be highly correlated with other explanatory variables variance inflation factors (VIFs) were calculated. VIFs of greater than 10 are a sign of collinearity, while mean VIFs considerably greater than one are signs of multicollinearity (Chatterjee and Hadi,

| Regression Analysis (Female workers only) |              |                |                                  |                          |        |
|---|--------------|----------------|----------------------------------|--------------------------|--------|
| Dependent Variable                        | Observations | R <sup>2</sup> |                                  |                          |        |
| Miles                                     | 222          | 0.048          |                                  |                          |        |
| Explanatory Variables                     | Coefficient  | P-Value        | Variance Inflation Factors (VIF) | 95% Confidence Intervals |        |
|   |              |                |                                  | Lower                    | Upper  |
| Wage                                      | 0.124        | 0.662          | 1.55                             | -0.372                   | 0.621  |
| Number of Children                        | 1.073        | 0.182          | 2.33                             | -0.508                   | 2.655  |
| Age                                       | -0.025       | 0.681          | 1.24                             | -0.147                   | 0.096  |
| Job Tenure (in months)                    | 0.009        | 0.554          | 1.55                             | -0.023                   | 0.043  |
| <b>Marital Status</b>                     | 6.339        | 0.001          | 2.05                             | 2.605                    | 10.073 |
| <b>Married with Children (number of)</b>  | -2.522       | 0.023          | 3.71                             | -4.689                   | -0.356 |
| Constant                                  | 10.023       | 0.001          |                                  | 4.086                    | 15.960 |
| mean (VIF)                                |              |                | 2.07                             |                          |        |

Table 2(a)

| Regression Analysis (Female workers only) |              |                |                                  |                          |        |
|---|--------------|----------------|----------------------------------|--------------------------|--------|
| Dependent Variable                        | Observations | R <sup>2</sup> |                                  |                          |        |
| Minutes                                   | 227          | 0.076          |                                  |                          |        |
| Explanatory Variables                     | Coefficient  | P-Value        | Variance Inflation Factors (VIF) | 95% Confidence Intervals |        |
|   |              |                |                                  | Lower                    | Upper  |
| Wage                                      | 0.162        | 0.521          | 1.54                             | -0.335                   | 0.660  |
| Number of Children                        | 0.458        | 0.567          | 2.34                             | -1.119                   | 2.036  |
| Age                                       | 0.043        | 0.477          | 1.24                             | -0.077                   | 0.164  |
| Job Tenure (in months)                    | 0.001        | 0.924          | 1.55                             | -0.031                   | 0.034  |
| <b>Marital Status</b>                     | 7.042        | 0.000          | 2.03                             | 3.353                    | 10.730 |
| <b>Married with Children (number of)</b>  | -2.341       | 0.034          | 3.68                             | -4.501                   | -0.180 |
| Constant                                  | 14.356       | 0.000          |                                  | 8.435                    | 20.282 |
| mean (VIF)                                |              |                | 2.06                             |                          |        |

Table 2(b)

**Table 2:** a) Regression analysis results where miles to work is the dependent variable.  
b) Regression analysis results where minutes to work is the dependent variable.

2006). The calculated VIFs indicate that collinearity is not a problem in the model and the mean VIFs of 2.07 and 2.06 suggest that multicollinearity is also not a concern.

The only two explanatory variables that are statistically significant in either of the models are marital status and the

interaction term, married with children (Preston et al., 2000). In the miles to work model being married increases female call center agents commutes by 6.3 miles, yet being married with children reduces their commutes by 2.5 miles per child. Similar results are seen in the minutes to work model. Being married increases agents'

commutes by seven minutes, while being married with children reduces these commutes by 2.3 minutes per child. Interestingly, neither of the two work related explanatory variables – wage and job tenure – had any effect on commuting behavior. It seems that the home and women's role in the home are the primary determinates of commuting behavior; however, these women's jobs do play a role in their travel behaviors in an elliptical manner.

As Rutherford and Wekerle note and as suggested in Table 1, there is not much variation in paid women's work – female dominated occupations. This lack of variation in wages may explain the narrow range of variation in travel miles and minutes seen in Figure 2 as well as the low explanatory power and statistically insignificant wage variables found in Tables 2(a) and 2(b). There may be little reason to travel very far or very long for a job that pays a low starting wage and where this wage increases slowly with job tenure. Essentially, women working in women's work appear to be trapped not only by their obligations in the home but also by the nature of their labor in the workplace.

## DISCUSSION

The primary findings from this analysis of gendered travel times and travel distances to work is that at least in the context of commuting to women's work (female dominated occupations) that it is women's varying roles in the home that produce variations in travel behavior. This is not to suggest the jobs that these women are commuting to are irrelevant. Women's work in itself is a type of spatial trap. Those limited to this type of work, call centers being an example, are faced with a narrow range of job opportunities. This lack of opportunities probably intensifies the role that domestic context plays in travel to work behavior.

Butler maintains that gender is a performance compelled by a masculinist discourse of ideal Womanhood (Nelson, 1999: 331; Gregson and Rose, 2000: 434; Jackson and Scott, 2001; Butler 1990, 1993). This discourse positions woman as man's Other: his helpmate, mother, wife, the mother of his children, secretary, nurse, housekeeper, nanny, etc. The roles that women perform become what women are – helpmates, mothers, wives, ... . Yet, Woman is not a monolithic subjectivity – women enact varying performances of womanhood. Butler makes the point that these differences in women's performances of womanhood derive from 'slippages' in gendered performances of identity, inexact copies of the ideal performance (Butler, 1990: 143; Nelson, 1999: 339).

What Butler is suggesting is that feminine gender in its various slippages is often indirectly defined in relation to the male. For example what makes being a call center agent women's work, places that employ few men, and by extension undervalued? Why is it that many low income women without husbands or with husbands who provide limited financial resources to the household find that they are constrained both occupationally and spatially? Why do women often still need the presence of a man in order to gain economic and spatial mobility? Why is it the presence or absence of men that often defines the situations in which women find themselves?

The findings of this study suggests it is these slippages in gendered performances, or put another way, these different ways of being a woman – married or single, mother or childless, depending on a husband's financial resources or financially on one's own, working in a female-dominated occupation or not, and all the various permutations of these alternatives – reacts with women's work – low paying, auxiliary, emotional labor – to produce suppressed expressions of

travel behavior to work. These findings beg the question: what are the travel behaviors of women employed in non-women's work? What this means for a theory of gendered travel behavior is that such a theory (or more likely, theories) cannot be developed without gaining a better understanding of women in their multiplicity as well as the often hidden role that the presence or absence of men play in the performances of female gender.

## NOTES

1. While the term reproductive labor comes from the Marxist literature and refers to unpaid labor within the home and the family, Heidi Nast has questioned the need to distinguish between productive and reproductive labor (Revisiting/Revisioning Contributions to Feminist Geography, 99th Annual Meeting AAG, New Orleans, 2003). Rather than producing commodities such as shoes, cars, watches, banking services, agricultural products, and "Happy Meals," households produce assets such as meals, laundry services, capital resources, education, emotional support, human beings, and, hopefully, properly socialized citizens.

2. There are discrepancies between the Census data and the data gathered for this study, the most glaring being the Census's reporting only twelve call centers in the Albuquerque MSA and the thirty call centers approached in our study. This discrepancy is due to the recent acknowledgement of the existence of this industry (see note 3) and the difficulty in actually defining what is a call center. For example, a stand-alone, third-party call center is simple to identify but a call center that is embedded within a marketing department or consumer service department of a multinational firm is more difficult to define. All thirty of the call centers in this study are embedded within large firms.

3. Call Centers did not become a government-recognized industry until the 1997 Economic Census. It was then that the federal government switched from the more than sixty-year-old Standard Industrial Classification (SIC) system to the North American Industry Classification System (NAICS), which was developed in conjunction with Mexico and Canada. Before the NAICS call center functions were spread and embedded among various SIC categories. The NAICS was developed in part to account for new industries such as call centers. (U.S. Department of Labor, Occupational Safety & Health Administration, [www.osha.gov/oshstats/naics-manual.html](http://www.osha.gov/oshstats/naics-manual.html))

4. While writing this paper one of the authors, ironically, made a reservation to stay at a hotel in Albuquerque. When the call center agents read back the information he had given her, she mistakenly had booked him into a hotel chain other than the one he had requested. From this mistake, it became obvious that she worked for a third-party call center whose clients included these two hotel chains and probably several others. This incident also highlights the constant mental juggling that is part of call center labor.

5. One of the authors worked for a year as a supervisor in an academic call center. This call center supported social and behavioral science survey research. The author witnessed firsthand the toll this type of work can take on call center employees. After a succession of rejections, many of them hang-ups, workers would often have to take breaks to recompose themselves. When they returned, they would ask for 'easy calls' – certain characteristics of respondents make them more likely to take part in a phone survey than others. On bad nights when employees got few or no responses, many would go home depressed. For a description of customer sexual harassment of

call center workers, see Sczesnt and Stahlberg (2000).

6. Eighteen surveys were discarded for one of two reasons. One, they were shift managers and thus skewed the numbers in terms of salary; or two, they were paid an annual wage instead of per hour and thus their hourly wage could not be calculated accurately.

## REFERENCES

- Batt, R., Colvin, A., Katz, H., and Keefe, J., 2004. Telecommunications 2004 Strategy, HR practices & performance: Cornell-Rutgers Telecommunications Project. *Center for Advanced Human Resources Studies Working Paper Series*, Working paper 04 – 18, [www.ilr.cornell.edu/CAHRS/](http://www.ilr.cornell.edu/CAHRS/).
- Belt, V., Richardson, R., and Webster, J. 2000. Women's work in the information economy: the case of telephone call centres. *Information, Communication, and Society* 3: 366-385.
- Belt, V., Richardson, R., and Webster, J., 2002. Women, social skill and interactive service work in telephone call centres. *New Technology, Work and Employment* 17: 20-33.
- Bishop, P., Gripaio, P., and Bristow, G. 2002. Determinants of call centre location: evidence for UK urban areas. *Urban Studies* 40: 2751-2768.
- Bloomfield, A. V., and Harris, R. 1997. The journey to work. *Historical Methods* 30(2): 97-110.
- Bonds, A. 2006. Calling on femininity?: gender, call centers, and restructuring in the rural American west," *ACME: An International E-Journal for Critical Geographies* 5: 28-49.
- Brannan, M.J. 2005. Once more with feeling: ethnographic reflections on the mediation of tension in a small team of call centre workers. *Gender, Work & Organization* 12: 420-439.
- Butler, J. 1990. *Gender Trouble: Feminism and the Subversion of Identity*. London: Routledge.
- Butler, J. 1993. *Bodies that Matter: On the Discursive Limits of "Sex"*. London: Routledge.
- Chatterjee, S., and Hadi, A.S. 2006. *Regression Analysis by Example, Fourth Edition*. New York: Wiley.
- Cohen, P.N., and Huffman, M.L. 2003. Operational segregation and the devaluation of women's work across the U.S. labor market. *Social Forces* 81: 881-908.
- Cope, M. 1998. Home-work links, labor markets, and the construction of place in Lawrence, Massachusetts, 1920-1939. *Professional Geographer* 50: 126-140.
- Cowie, C. 2007. The accents of outsourcing: the meanings of "neutral" in the Indian call centre industry. *World Englishes* 26: 316-330.
- Dyck, I. 1989. Integrating home and wage workplace: women's daily lives in a Canadian suburb. *The Canadian Geographer* 33: 329-341.
- Dyck, I. 1990. Space, time, and renegotiating motherhood: an exploration of the domestic workplace. *Environment and Planning D* 8: 459-483.
- England, K.V.L. 1991. Gender relations and the spatial structure of the city. *Geoforum* 22: 135-147.

- England, K.V.L. 1993. Suburban pink collar ghettos: the spatial entrapment of women? *Annals of the Association of American Geographers* 83: 225-242.
- Feinberg, R.A., Kim, I.-S, Hokama, L., de Ruyter, K., and Keen, C. 2000. Operational determinants of caller satisfaction in the call centre. *International Journal of Service Industry Management* 11: 131-141.
- Fernandez, R.M., and Sosa, M.L. 2005. Gendering the job: networks and recruitment at a call center. *American Journal of Sociology* 111: 859-904.
- Fernie, S., and Metcalf, D. 1998. (Not) hanging on the telephone: payment systems in the new sweatshhops',” *Discussion Paper No. 390*, Centre for Economic Performance.
- Forseth, U. 2005. Gender matters? Exploring how gender is negotiated in service encounters. *Gender, Work & Organization* 12: 440-459.
- Gibson-Graham, J.K. 1996. *The End of Capitalism (as we knew it): A Feminist Critique of Political Economy*. Oxford: Blackwell.
- Gilbert, M.R. 1998. ‘Race’, space, and power: the survival strategies of working poor women. *Annals of the Association of American Geographers* 88: 595-621.
- Glasmeier, A., and Borchard, G. 1989. From branch plants to back offices: prospects for rural services growth. *Environment and Planning A* 21: 1565-1585.
- Hall, J.D., Korstad, R., and Leloudis, J. 1986. Cotton mill people: work, community, and protest in the Textile South, 1880-1940. *American Historical Review* 91(2): 245-287.
- Hanson, S., and Pratt, G. 1988a. Reconceptualizing the links between home and work in urban geography. *Economic Geography* 64: 299-321.
- Hanson, S., and Pratt, G. 1988b. Spatial dimensions of the gender division of a local labor market. *Urban Geography* 9: 180-202.
- Hanson, S., and Pratt, G. 1991. Job search and the occupational segregation of women. *Annals of the Association of American Geographers* 81: 229-253.
- Hanson, S. and Pratt, G. 1992. Dynamic dependencies: a geographic investigation of local markets. *Economic Geography* 68: 373-405.
- Hanson, S., and Pratt, G. 1994. On Suburban Pink Collar Ghettos: *The Spatial Entrapment of Women?* by Kim England. *Annals of the Association of American Geographers* 84: 500-504.
- Hanson, S. and Pratt, G. 1995. *Gender, Work, and Space*. New York: Routledge.
- Hochschild, A.R. 1983. *The Managed Heart: Commercialization of Human Feeling*. Berkeley: University of California Press.
- Hochschild, A.R. and Machung, A. 2003. *The Second Shift*. New York: Penguin.
- Howland, M. 1993. Technological change and the spatial restructuring of data entry and process services. *Technological Forecasting and Social Change* 37: 185-196.
- Jackson, S., and Scott, S. 2001. Putting the body’s feet on the ground: towards a sociological reconceptualization of gendered and sexual embodiment. In *Constructing Gendered Bodies*, eds. Backett-Milburn, K. and McKie, L., New York: Palgrave.
- James, N. 1989. Emotional labor: skill and work in the social regulation of feelings. *Sociological Review* 37: 15-42.

- Johnston-Anumonwo, I. 1997. Race, gender, and constrained work trips in Buffalo, NY, 1990. *Professional Geographer* 49: 306-317.
- Kwan, M.-P. 1999a. Gender, the home-work link, and space-time patterns of nonemployment activities. *Economic Geography* 75: 370-394.
- Kwan, M.-P. 1999b. Gender and individual access to urban opportunities: a study using space-time measures. *Professional Geographer* 51: 210-227.
- Law, R. 1999. Beyond 'women and transport': toward new geographies of gender and daily mobility. *Progress in Human Geography* 23: 567-588.
- Leidner, R. 1991. Serving hamburgers and selling insurance: gender, work, and identity in interactive service jobs. *Gender and Society* 5: 155-177.
- McDonald, M. 2000. Laughing all the way to the (phone) bank. *U.S. News & World Report*, May 29.
- McLafferty, S., and Preston, V. 1991. Gender, race, and commuting among service sector workers. *Professional Geographer* 43: 1-15.
- McLafferty, S. and Preston, V. (1997). Gender, race, and the determinants of commuting: New York in 1990. *Urban Geography* 18: 192-212.
- Massey, D. 1997. Economic/non-economic. In *Geographies of Economies*, eds. Lee, D, and Wills, J., London: Arnold.
- Mattingly, D. 1999. Job search, social networks, and local labor market dynamics: the case of paid household work in San Diego, California. *Urban Geography* 20: 46-74.
- Mulling, B. 1999. Sides of the same coin? coping and resistance among Jamaican data-entry operators. *Annals of the Association of American Geographers* 89: 290-311.
- Nelson, L. 1999. Bodies (and spaces) do matter: the limits of performativity. *Gender Place, and Culture: A Journal of Feminist Geography* 6: 331-353.
- Neth, M. 1994. Gender and the family labor system: Defining work in the rural Midwest. *Journal of Social History* 27(3): 563-578.
- Pickup, L. 1984. Women's gender-role and its influence on their travel behavior. *Built Environment* 10: 61-68.
- Prabhaker, P., Sheehan, M.J., and Coppett, J.I. 1997. The power of technology in business selling: call centers. *Journal of Business & Industrial Marketing* 12: 222-234.
- Pratt, G., and Hanson, S. 1991. Time, space, and the occupational segregation of women: a critique of human capital theory. *Geoforum* 22: 149-157.
- Preston, V., Rose, D., Norcliffe, G., and Holmes, J. 2000. Shift work, childcare and domestic work: divisions of labour in Canadian paper mill communities. *Gender, Place, and Culture* 7: 5-29.
- Richardson, R., Belt, V., and Marshall, N. 2000. Taking calls to Newcastle: the regional implications of the growth in call centres. *Regional Studies* 34: 357-370.
- Rutherford, B. and Wekerle, G. 1988. Captive rider, captive labor: spatial constraints on women's employment. *Urban Geography* 9: 173-193.
- Sayer, A. 1997. The dialectic of culture and economy. In *Geographies of Economies*, eds. Lee, D. and Wills, J., London: Arnold.

Sczesnt, S., and Stahlberg, D. 2000 Sexual harassment over the telephone: occupational risk at call centres. *Work & Stress* 14: 121-136.

Shulman, B. (2003) *The Betrayal of Work: How Low-Wage Jobs Fail 30 Million Americans*. New York: The New Press.

Taylor, P. and Bain, P. 1999. 'An assembly line in the head': work and employee relations in the call centre. *Industrial Relations Journal* 30: 101-117.

Tichenor, V. J. 1999. Status and income as gendered resources: the case of marital power. *Journal of Marriage and the Family* 61: 638-650.

Tichenor, V. J. 2005. Maintaining men's dominance: negotiating identity and power when she earns more. *Sex Roles* 53: 191-205.

United States Census. 2004. [www.census.gov](http://www.census.gov).

United States Department of Labor, Bureau of Labor Statistics. 2004. [www.bls.gov/data/](http://www.bls.gov/data/)

Warf, B. 1989. Telecommunications and the globalization of financial services. *Professional Geographer* 41: 257-271.

Warf, B. 1993. Back office dispersal: implications for urban development. *Economic Development Commentary* 16: 11-16.

Williams, C. 2004. The glass escalator: men who do women's work. In *Gender and Work in Today's World: A Reader*, eds. Sacks, N.E., and Marrone, C., Cambridge, MA: Westview Press.

Winiecki, D.J. 2007. Subjects, subjectivity, and subjectification in call center work. *Journal of Contemporary Ethnography* 36: 351-377.