

## Sociodemographic factors that affect burnout outcomes in working mothers versus men

Factores sociodemográficos que contribuyen al burnout en madres trabajadoras en comparación con hombres

*Erika Villavicencio-Ayub<sup>a</sup>, César A. Gallardo Guzmán<sup>b</sup>, & Jessica Zeltzin Villegas López<sup>c</sup>*

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### Abstract:

Despite the growing participation of Mexican women in the workforce, women are generally responsible for childcare to a greater extent than men, leading to higher Burnout Outcomes from role overload in working mothers than fathers. The present cross-sectional correlational study sought to find the effects of Having Children and Relationship Status on Burnout Outcomes in a sample of 1,447 working women and men from Mexico City and how these effects if any at all, vary according to sex. An initial analysis showed that participants with children benefited from lower Exhaustion, Dissatisfaction, and Averaged Burnout, but a MANOVA failed to find any significant interaction effects between Sex and Having Children. Relationship status alone could not explain Burnout outcomes, but when analyzed in interaction with Having Children, partnered mothers showed, counterintuitively, higher levels of Exhaustion, Dissatisfaction, and Averaged Burnout than single mothers. Possible explanations and implications are discussed.

### Keywords:

*Burnout, Role Overload, Parenthood, Working Mother, Sex Differences*

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### Resumen:

A pesar de la creciente participación de las mujeres mexicanas en la fuerza laboral, éstas generalmente asumen el cuidado de los hijos proporcionalmente más que los hombres, lo que las podría conducir a mayores niveles de Burnout por sobrecarga de rol. El presente estudio transversal correlacional buscó conocer los efectos de Tener Hijos y Tener Pareja en los niveles de Burnout en una muestra de 1,447 hombres y mujeres trabajadores de la Ciudad de México, evaluado con la Escala de Desgaste Ocupacional, y cómo estos efectos, de existir, varían de acuerdo al sexo. La prueba *t* inicial mostró que los participantes con hijos gozaban de menor Agotamiento, Insatisfacción y Burnout promedio, pero una prueba MANOVA no logró encontrar una interacción significativa entre Sexo y Tener Hijos. Posteriormente un ANOVA evaluando independientemente a las mujeres halló que el efecto protector de tener hijos ya no era significativo, excepto para insatisfacción. El Estado Civil por sí solo no pudo explicar los niveles de Burnout, pero analizado en interacción con Tener Hijos, mostró que las mujeres con pareja padecían mayores de niveles de Agotamiento, Insatisfacción y Burnout promedio que las madres solteras. Se discuten posibles explicaciones y sus implicaciones.

### Palabras Clave:

*Burnout, Sobrecarga de Rol, Paternidad, Madres Trabajadoras, Diferencias de Sexo.*

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### INTRODUCTION

Burnout Syndrome (BS) is an occupational health hazard characterized by Exhaustion, both physical and psychological, Depersonalization, described as cognitive distancing from job-related activities, and feelings of reduced personal accomplishment or Dissatisfaction (Maslach, Schaufeli, &

Leiter, 2001). That results from an individual's chronic exposure to the work-related strain caused by demands that exceed the subject's available resources (Alarcon, 2011). Strain, however, may come from sources external to the job.

The increasing participation of women in the workforce has modified traditional family dynamics and brought up previously unaccounted issues, such as work-home interaction

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<sup>a</sup> Facultad de Psicología, Universidad Nacional Autónoma de México, Ciudad Universitaria, ORCID: 0000-0003-0021-5020, Email: erikavilla@hotmail.com

<sup>b</sup> Facultad de Psicología, Universidad Nacional Autónoma de México, Ciudad Universitaria, ORCID: 0000-0002-7718-8166, Email: cesar.gallardo.gg@gmail.com

<sup>c</sup> Facultad de Psicología, Universidad Nacional Autónoma de México, Ciudad Universitaria, Email: jess\_lopez17@hotmail.com

and, complementarily, home-work interaction (Peeters, Montgomery & Schaufeli, 2005). Despite the transformation of the traditional gender role of women as caregivers, traditional gender roles of men have not changed to the same extent, and a notorious gender bias prevails in respect of the division of labor in the family sphere, with women still being responsible for most of the family and domestic chores even when both partners are employed (Andrade & Mikula, 2014; Mikula, Riederer, & Bodi, 2011). For instance, even though family and work role overload are both predictors of perceived stress regardless of gender, family role overload is a larger constituent of total role overload and perceived stress in women relative to men (Duxbury, Stevenson, & Higgins, 2018).

When complying with multiple roles, strain and conflict originated from one role will leak into the other (Bakker & Demerouti, 2013), both by spillover (conflicts in the work domain that are transferred to non-work domains and vice versa) and crossover (conflicts an individual is experiencing in one domain, i.e., work, are transmitted to an unrelated individual in another domain, i.e., family members). Furthermore, the resulting strain from work and family roles is not just the sum of each role's strain, but new conflicts may arise when an individual attempt to breach the gap between roles by investing additional resources in one role in order to meet its demands (Grandey & Cropanzano, 1999).

Risk of role overload notwithstanding, performing multiple roles may have positive effects on a person. Healthy work-life can be associated with positive affect at home and favorable family outcomes by work-family facilitation (the "positive" aspect of work-home interaction) when a healthy work-family culture exists at the workplace (Braunstein-Bercovitz, 2013; Culbertson, Mills, & Fullagar, 2012); or at the very least, success in one role could mitigate strain from another role by being an alternative source of resources and positive experiences, hence helping to cope with the demands of the other role (Dishon-Bercovitz, 2013; Kulik, Shilo-Levin, & Liberman, 2014). When some of the roles assumed are mutually incompatible, there is little social support perceived and limited access to resources and opportunities to replenish, that the multiple roles become a source of conflict instead (Robinson, Magee, & Caputi, 2016).

As has been briefly summarized, there are positive and detrimental effects of performing multiple roles. However, comparative research on BS between genders has yielded inconclusive results, in some instances showing slightly higher levels of averaged Burnout in women (Norlund et al., 2010), comparable levels of averaged Burnout but higher Exhaustion in women (Innstrand, et al., 2011) or higher Exhaustion in women but higher Depersonalization in men (Purvanova & Muros, 2010). We will be referring to BS dimensions, including averaged Burnout score as a nominal variable under the name of Burnout Outcomes (BO), different from Averaged Burnout (AB), which refers to the averaged Burnout score alone.

In Latin America and Mexico, there is an even broader gap to be filled to understand the effects that gender, parenthood, and paid work have on Burnout. Women's participation in Mexico's economic sphere has been steadily increasing since the latter half of the twentieth century; some factors cited a decline in fecundity, higher education rates, and living standards that have not ceased to deteriorate since the 1982 economic crisis (Garduño-Rivera, 2013). However, despite having a work-life, Mexican working mothers, wives, and daughters still living with their parents face more time demands and responsibilities at home than independent childless women and men, in general, do (Ruiz, 2012). While there is increasingly available research on Burnout in Latin American and Mexican women, little can be found in international peer-reviewed journals. Most research is limited to Spanish-speaking journals or dissertations available at universities' web repositories, severely limiting its reach. Furthermore, gender comparative research is markedly absent, and motherhood is mostly presented just as a demographic characteristic of the sample but not as an independent variable.

In one study, Rodríguez, Trillos, and Baute (2014) surveyed 203 housewives from the city of Santa Marta, Colombia, to elucidate the demography of burned-out housewives. They examined several characteristics, such as marital status, educational level, socioeconomic level, and remunerated job. Having children (HC) was assessed but not analyzed. They found a higher prevalence of BS among unemployed women. Despite it being a noteworthy finding, conclusions drawn from it are constrained by one important limitation: all the study results were based on frequency analyses. To what extent these results can be extrapolated to Mexican women may also be subject to discussion. However, it has been brought up in the present study, assuming that there should be some similarities since both Mexico and Colombia are Latin American developing countries that share a colonial past.

Graxiola-Villa (2014) surveyed a sample of 120 female, college, part-time and full-time professors of Sonora University who were also housekeepers. Furthermore, those who dedicated the most weekly hours to caring for their homes and families pointed higher in the personal growth ( $t = -2.63, p \leq .05$ ) and life purpose ( $t = -3.23, p \leq .05$ ) sub-scales of the Ryff Psychological Well-being Scale. The BO in which subjects tended to score higher was "Emotional exhaustion" ( $F = 3.34, p \leq .05$ ).

In a doctoral dissertation, Castañeda (2012) delved into the cultural aspects of nursery and womanhood in Mexico, roles that she considers to "stack up" given that in both they are driven to behave as selfless caregivers compelled to serve by an internalized sense of obligation to serve which in turn derives from strong gender and professional roles. Castañeda surveyed 179 nurses from Tampico, Mexico, with a female majority of 96%. From the sample, 34 subjects scored high on BO, all women except for one man, but a bivariate analysis did not reveal the gender to be statistically significant ( $\chi^2 = 0.11, p =$

0.75), albeit probably because of the small sample of men to compare. In contrast with Graxiola-Villa (2014), the highest-scoring BO was Dissatisfaction, while Exhaustion was the lowest.

In a different dissertation for an undergraduate degree, Narvaez (2016) assessed BO and work engagement levels in working women in relation to age, motherhood and work-life balance among other variables. It was found that participants with children had slightly higher, yet significant higher levels of engagement (Vigor:  $t = 3.54, p < .001$ ; Dedication:  $t = 2.88, p < .001$ ; Absorption:  $t = 2.78, p = .01$ ) and lower levels of BO (Depersonalization:  $t = -2.06, p = .04$ ; Cynicism:  $t = -3.23, p < .001$ ).

To our knowledge, there are yet no published studies conducted with the Latin American population that have sought to assess the effects of HC and relationship status (RS) on BO and compare how these effects, if any, differ between men and women given cultural gender roles about childcare and domestic labor.

## METHOD

The present was cross-sectional correlational study t-tests for independent samples to assess BO's differences within sociodemographic variables Sex, HC, and RS. A Multivariate Analysis of Variance was conducted to assess possible variable interactions, and finally, a One-Way ANOVA was conducted to assess interaction effects between HC and Relationship Status on BO in women exclusively.

### Participants

Sampling was non-probabilistic for convenience, with informed consent, and anonymity was guaranteed. A sample of 1,447 workers from Mexico City from both private and public organizations was recruited through convenience sampling, of which 767 (53%) were women. Mean age was 36.15 years old, with ages ranging from 16 to 66 years old; 793 (54.80%) participants reported to have children, 971 (67.10%) were in a relationship at the time of the study, and 154 (10.64%) were single parents, of which 115 were women. The average educational level was an undergraduate degree, with 640 participants (44.22%) having attained it.

### Instruments

The Occupational Burnout Scale (EDO, for its acronym Spanish), an instrument consisting of 67 items standardized for the Mexican population, was used to assess Exhaustion (T1), Depersonalization (T2), Dissatisfaction (T3), and Averaged Burnout (AB). The instrument's reliability was of  $\alpha = .905$ .

### Procedure

Public and Private organizations from Mexico City with which the researchers had already worked in previous projects were invited to participate in a study to assess BS in employees. In exchange, organizations were offered to get the results from the

assessments (without information that could be used to identify individual employees) and recommendations to develop training and development programs.

Subjects that agreed to participate received an explanation about the purpose of the investigation (specific hypothesis were not disclosed to avoid biasing results) and its voluntary nature and were given an informed consent form to read and sign in which confidentiality and their right to leave at any moment did they not wish to continue were guaranteed. Tests were filled during working hours, with a member of the research team always present to read the instructions, answer any doubts regarding vocabulary, verify participants filled the instrument correctly and thank them for their participation. Statistical analyses were performed in IBM SPSS Statistics 23.

## RESULTS

BO was obtained using the formula provided in the EDO,  $Z = (X-M)/S$ , where  $Z$  represents the outcome's final score,  $X$  is the raw score of each outcome,  $M$  represents average BO in the Mexican population provided in advance by the EDO and  $S$  is the standard deviation of BO in Mexican population as well provided in advance by the EDO. Scores are on a scale of 100 where a score of less than 29 represents very low Burnout, 30 to 39 is low, 40 to 49 is medium-low, 50 to 60 is medium-high, 61 to 70 is high, and 71 to 100 is very high.

To get a general overview of how BO differ according to Sex, HC and RS, t-tests for independent samples were performed. First we compared BO in men (T1,  $M = 51.27, SD = 7.19$ ; T2,  $M = 49.87, SD = 10.13$ ; T3,  $M = 50.86, SD = 10.95$ ; AB,  $M = 50.66, SD = 7.24$ ) and women (T1,  $M = 54.25, SD = 9.35$ ; T2,  $M = 48.32, SD = 8.93$ ; T3,  $M = 52.97, SD = 12.61$ ; AB,  $M = 51.85, SD = 8.08$ ). Significant differences were found in T1,  $t(1417.33) = -6.83, p < .01$ ; T2,  $t(1362.91) = 3.06, p < .01$ ; T3,  $t(1444.41) = -3.41, p < .01$ ; and AB,  $t(1444.81) = -2.93, p < .01$ . However, it is noteworthy that despite some statistically significant differences being found, throughout all analyses BO were always within the medium-low and medium-high range.

Then we assessed differences in BO between subjects with children (T1,  $M = 52.32, SD = 8.70$ ; T2,  $M = 48.74, SD = 9.46$ ; T3,  $M = 51.04, SD = 11.84$ ; AB,  $M = 50.70, SD = 7.71$ ) and subjects with no children (T1,  $M = 53.49, SD = 8.29$ ; T2,  $M = 49.42, SD = 9.63$ ; T3,  $M = 53.12, SD = 11.88$ ; AB,  $M = 52.01, SD = 7.66$ ). Significant differences were found in T1,  $t(1445) = -2.59, p < .01$ ; T3,  $t(1445) = -3.32, p < .01$ , and AB,  $t(1445) = -3.22, p < .01$ . Relationship Status was tested, but no significant differences were found.

One-Way Multivariate Analyses of Variance (MANOVA) was conducted to assess interaction effects between variables of interest. The first interaction tested was of Sex and Having Children, which did not have a significant effect, Wilk's  $\Lambda = .996, F(4, 1440) = 1.587, p > .05, \eta^2 = .004$ . Next, we assessed the effect of the interaction between Sex, HC, and RS, which resulted significant but with negligible effect size,

Wilk's  $\Lambda = .978$ ,  $F(16, 4387.69) = 1.987$ ,  $p > .05$ ,  $\eta^2 = .006$ , so no post hoc tests were conducted.

Finally, we sought to understand how interest variables interact in BO of women (descriptive statistics are displayed in Table 1). We created dummy variables to separate T1, T2, T3, and AB scores of women from men's and performed a One-Way ANOVA for HC and RS. A significant effect of HC on T3 was found,  $F(1, 763) = 4.564$ ,  $p = .033$ . Post hoc comparisons using a Bonferroni test indicated a statistically significant difference in T3 means between women who had children ( $M = 52.45$ ,  $SD = 13.08$ ) and women who did not have children ( $M = 53.61$ ,  $SD = 12.03$ ).

Table 1.  
Descriptive Statistics of women subgroups

	T1		T2		T3		AV	
	M	SD	M	SD	M	SD	M	SD
Having Children								
Yes n = 415	54.04	9.96	48.42	9.44	52.45	13.08	51.63	8.57
No n = 352	54.51	8.59	48.21	8.29	53.61	12.03	52.11	7.46
Relationship Status								
P n = 498	54.56	9.58	48.16	8.99	53.50	13.18	52.07	8.37
S n = 352	53.68	8.9	48.63	8.83	52.02	11.45	51.44	7.50

Note: P = Partnered, S = Single

Relationship Status did not have a significant effect on BO, but the interaction between RS and HC had a significant effect on T1,  $F(1, 763) = 13.168$ ,  $p < .01$ ; T3  $F(1, 763) = 4.993$ ,  $p = .026$ ; and AB,  $F(1, 763) = 4.843$ ,  $p = .028$ . Post hoc comparisons using a Bonferroni test showed that women who were partnered and had children had statistically higher means of T1 ( $M = 55.04$ ,  $SD = 10.40$ ), T3 ( $M = 53.53$ ,  $SD = 13.89$ ) and AB ( $M = 52.22$ ,  $SD = 8.93$ ) than women who had children but were single; T1,  $M = 51.42$ ,  $SD = 8.17$ ; T3,  $M = 49.60$ ,  $SD = 10.19$ ; AB,  $M = 50.09$ ,  $SD = 7.36$  (A breakdown of the women subgroups descriptive statistics is presented in Table 2).

### DISCUSSION

The present study corroborated that women have average statistically higher burnout outcomes in this Mexican sample than men (albeit within a narrow range), as had been previously found in studies from different countries.

Single mothers are generally more disadvantaged in aspects such as educational level and income. In our sample, for instance, the mean educational level of single mothers was elementary school, only 5.5% had a college degree, and a mean monthly income of \$7,133.68 pesos, while partnered mothers had a mean educational level of middle school, 10.8% had a college degree and a mean monthly income of \$8,184.32 pesos.

From this data, and in the absence of other studies of the kind, one would intuitively be led to believe that single mothers should have scored higher BO than partnered mothers; however, the opposite was true.

Table 2.  
Descriptive statistics of women subgroups

	E		D		Di		B	
	M	SD	M	SD	M	SD	M	SD
Children								
P n = 300	55.04	10.40	48.09	9.30	53.54	13.89	52.22	8.94
S n = 115	51.42	8.17	49.27	9.81	49.60	10.19	50.10	7.36
No children								
P n = 198	53.83	8.15	48.27	8.52	53.44	13.89	51.85	7.45
S n = 154	55.38	9.08	48.14	8.01	53.82	12.03	52.45	7.47

Note: E = Exhaustion, D = Despersonalization, Di = Dissatisfaction, B = Burnout, P = Partnered, S = Single

The finding that having a partner has a negative effect in BO on working mothers but not on single women opens the way for new studies to explore how gender role inequality in Mexican societies (particularly concerning childcare) might be detrimental to women.

### Limitation and suggestions

As an exploratory study with a reasonably large sample, it is hoped that the present paper will pave the way for future, more in-depth research on the variables that affect BO in working mothers, accounting for the limitations that ran into it.

A significant limitation that should be addressed in further studies is the definition of Relationship Status. Since it was set as a dichotomic variable, it does not provide any information about the male's involvement in caring for the children. Family structure, family roles, male involvement in caring for children, and even domestic violence should be assessed in future studies that seek to shed light on the factors present in a relationship that differentially affect BO in men and women.

Domestic violence may be playing an important yet overlooked role as a factor that contributes to BO in Mexican mothers. The National Institute of Women (INMUJERES, 2014) revealed that 66.1% of women 15 years old or older had been victims of gender-based violence, and a sentimental partner has victimized 43.9% of women. In Mexico City, where the present study was conducted, more than 50% of women have been victimized by a sentimental partner, which could influence how working mothers experience Burnout.

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