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Division Of Household Labor and the Psychological Wellbeing of Women in the Middle East
and North America

Rawda Tomoum

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Science in Clinical Psychology
Department of Psychology & Counseling

Amy R. Hayes, Ph.D., Committee Chair

College of Education and Psychology

The University of Texas at Tyler
July 15, 2021

The University of Texas at Tyler
Tyler, Texas

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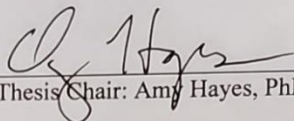
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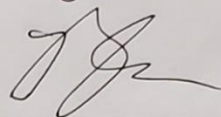
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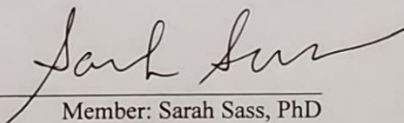
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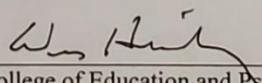
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Abstract

DIVISION OF HOUSEHOLD LABOR AND THE PSYCHOLOGICAL WELLBEING OF WOMEN IN THE MIDDLE EAST AND NORTH AMERICA

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The purpose of this study was to compare the division of household labor (HL) across the Middle East and North Africa (MENA) region and North America. I also examined the impact of gendered division of HL on stress, depression, and anxiety levels. As predicted, division of HL was more gendered in the Middle East than in North America. Also, as predicted, gendered division of household labor was associated with higher levels of psychological distress among women. Looking across regions, there was a moderate association between HL and psychological distress among Middle Eastern women. HL and childcare combined were strongly associated with higher levels of depression among working mothers in the MENA region. The association was very weak, yet significant, among women in North America. There was no correlation between HL and psychological distress among males.

Keywords: Division of household labor, second shift, Middle East, working mothers

Literature Review

Introduction

Over the past decades, women – and many men – have fought hard to establish justice for women in many respects. Although women’s rights have come a long way since the long global fight for voting rights (comprehensively reviewed by Amar, 1994; Wang et al., 2017), the reality of women in many countries is not always consistent with the laws and rulings that are in place. To this day, women are still fighting for equal pay and equal representation in the workplace and for more seats in leadership positions and political settings (Cassells & Duncan, 2019; Catalyst, 2020; Humprecht & Esser, 2017; Kumar, 2017; Thorton, 2020). Women are still pushing for equal status in the household, and, most importantly, for equal status in the minds of the people. The purpose of this study is to examine the impacts of inequity in the division of household labor (HL) on the psychological wellbeing of women; specifically, what are the impacts of gendered divisions of HL on stress, depression, and anxiety among women in the Middle East and North Africa as compared to North American countries?

Culture and Gender Roles

Research has shown that attitudes toward gender roles are strongly associated with the hierarchical or egalitarian values present in the society on the macro-level: traditional gender roles are more likely reflected in societies that value hierarchy, and vice versa (Lomazzi & Seddig, 2020). In countries where there are more equitable laws and policies regarding women’s rights, women’s employment and income strongly impact the division of HL (Fuwa & Cohen, 2007). In addition, a country’s overall cultural values affect not only the ability of women to enter the workplace and hold traditionally male-dominated jobs, but also the one-on-one

negotiations within the micro-level of the household regarding how family roles are defined (Fuwa & Cohen, 2007).

Women have acquired more freedom on the personal, professional, and political level relative to their status prior to the third-wave feminist movement of the 1970s (Kinser, 2004). However, considerable change is still needed on the micro-level of the household to achieve better workload balance and justice for women. Cultural gender roles and norms have long affected not only the division of household labor (HL) but also the amount of time and effort split within the family structure. Across several decades, women's share of household responsibility remained twice as much as their male partners or counterparts (Coltrane, 2000; Deutsch et al., 1993; Kluwer et al., 1997, 2000; Lachance-Grzela & Bouchard, 2010; Lane, 2014; Mannino & Deutsch, 2007).

On the micro-level, couples with egalitarian ideologies tend to have a smaller gap in the division of HL. Nevertheless, even among those couples with more egalitarian gender roles, women remain most likely to complete the majority of household tasks relative to their husbands (Batalova & Cohen, 2002; Blood Jr. & Wolfe, 1960; Fuwa, 2004). By looking at the literature comprehensively reviewed by Coltrane (2000) and Lachance-Grzela and Bouchard (2010) (e.g. Artis & Pavalko, 2003; Erickson, 2005; Mannino & Deutsch, 2007; Pinto & Coltrane, 2009), it is clear that the gap in women's and men's household participation has remained fairly consistent over the past few decades, despite legal and social changes in women's rights.

A Cross-Cultural Perspective on Gender Roles

Despite the presence of a gap in gender equity in their cultures, Western societies are still far more advanced than their Middle Eastern and North African counterparts, in which systemic gender inequalities are more evident in legal and cultural practices. Beliefs in democracy and

gender equality in the first place barely receive any support in the Arab countries; they are endorsed by just about 17% of the population who happen to have higher educational levels and belong to a higher socioeconomic status. This especially applies to young males aged 25–35 in 2007 who demonstrated the most patriarchal attitudes (Kostenko et al., 2016).

As per the Global Gender Gap (GGG) Report in 2020, the average gender gap score in the Middle East and North Africa (MENA) was the lowest of any global region (60.5%), while the highest was that of Western Europe (76.7%) and second to highest was North America (72.9%; Schwab et al., 2019). At the current rate of increase in women's equality, these gender gaps are projected to close in 54 years in Western Europe as opposed to 140 years in MENA .

Gender Roles in the Middle East and North Africa

Arab countries make up a large portion of the MENA region and spread across the Gulf region. In the Arab world, managerial positions are associated with masculinity – which is related to cultural beliefs linking men with positions of authority in general (Hutchings et al., 2010, 2012; Tlaiss, 2015; Tlaiss & Mendelson, 2014). Both on the macro and micro-level in the MENA region, traditional gender ideology dictates that men become the main – if not the sole – breadwinner of their household; they are perceived as and expected to be competitive and ambitious. Women, on the other hand, are to be the nurturing element of the household and the ones in charge of chores – all while “willingly” submitting to the power and authority of men within both the family setting and other professional or societal domains (Hutchings et al., 2010, 2012; H. Tlaiss, 2015; H. A. Tlaiss, 2013; Yount, 2005a, 2005b; Yount et al., 2014, 2018).

Previous researchers have labelled this system, with men assuming all breadwinning roles and women assuming all caretaking roles, as “the patriarchal bargain” (James-Hawkins et al., 2017; Moghadam, 2003, 2005; Sharabi, 1988). Eventually, “Neo-patriarchy” was the region's

attempt to modernize patriarchy, where women are allowed to enhance their education and participate in the workforce as means to enhance the family structure by becoming better wives and mothers (Charrad, 2011; Hasso, 2010; James-Hawkins et al., 2017; Moghadam, 2003). Nevertheless, women were still expected to assume and maintain sole responsibility of HL, including childcare, and to abide by their submissive status in the household hierarchy (Hasso, 2010; James-Hawkins et al., 2017; Moghadam, 2003; Olmsted, 2005).

Interestingly, evidence has shown that this mentality has persisted even among the Arab American population. Similar to families living in the MENA region, Arab American families also consider women's education as a resource that benefits the family as a whole rather than as an individual asset, and women give up market opportunities for the sake of their first and foremost priority: the family (Read & Oselin, 2008).

Social, Economic, and Political Repercussions: A Vicious Cycle

Research has shown that around 20% of women in the MENA region were married by the age of 18 (ICF International, 2015; Yount et al., 2018). As a result, these women give up a source of income, social exposure, and emotional and cognitive skills they could rely on to formulate decisions or handle negotiations both within and without the household (Dahl, 2010; Dixon-Mueller, 2008; Field & Ambrus, 2008; Yount et al., 2018).

Consequently, from an economic and political perspective, the Middle East and North African nations have the lowest ratio of women to men in the marketplace, and they tie with East Asian nations in having the lowest political representation of women in parliaments (Bose, 2015). According to the Egyptian Labor Market Panel Survey (ELMS) published in 2019, male participation in the Egyptian labor force was consistently and significantly higher than female participation. Among the population aged 25 – 55 years old, the percentage of male participation

ranged from approximately 60% – 95%, and the percentage of female participation ranged from approximately 20% – 30%. The GGG Report 2020 rankings have also been parallel to the previous findings. Tables 1 and 2 show the rankings of North American, Western European, and Middle Eastern countries in economic participation and opportunity as well as in political empowerment (Schwab et al., 2019). As shown, with the exception of Israel, absolutely all MENA countries fall below North American and Western European countries in the GGG Index ranking for economic participation and opportunity. Also, with the exception of Luxembourg, the United States of America, and Cyprus, all Western European countries and Canada fall above MENA countries in the GGG Index ranking for political empowerment.

The vicious cycle thus continues to thrive. All the previously mentioned further contributes to the inequity and injustice for women within the household and society. The marginalization of women results in less education, less exposure to social and professional outlets, and thus less growth. Consequently, women are deprived from the empowerment they would need to establish gender equity and justice within their household and society as a whole. And the vicious cycle continues to thrive, over and over.

Gendered Household Labor and Psychological Distress

Several research studies have addressed the psychological impact of gendered HL and the various factors that play a role in its accompanying psychological distress. As mentioned earlier, such structure limits women's participation in the workforce, which affects her financial situation and has its impact on marital and family satisfaction, psychological well-being, and perceptions of fairness (Shelton & John, 1996).

Barnett and Shen (1997) and Bartley et al. (2005) examined the difference between household tasks with high-schedule control versus low-schedule control on psychological

distress. The nature of tasks that are typically assigned to women (such as cooking and doing the laundry) have significantly low schedule control since they need to be done at relatively specific time intervals. On the other hand, tasks that are typically assigned to men (such as car maintenance or mowing the yard) have much higher schedule control. That is, even if the number of tasks in household patterns' schedules are equal, women have very limited flexibility or control over the timing of their tasks, whereas the opposite is true for men. Both studies concluded that low-control HL is associated with more psychological distress than high-control HL.

Even as the traditional household structure has shifted to reflect more of a dual-earner structure, wherein both men and women work and provide for the house, women still have little say on the division of HL in terms of amount of load as well as the choice of tasks (Bartley et al., 2005). Depression among women, thus, became one of many impacts of such inequity – especially with parenthood (Barnett & Shen, 1997; Mayberry et al., 2007).

One major element affecting women's psychological distress is their own perception of equity – or inequity – in their marriage or household structure (Bartley et al., 2005; Claffey & Mickelson, 2008; Lavee & Katz, 2002; Lively et al., 2010). Such perceptions are influenced not just by the amount of time these women dedicate to HL compared to their husbands, but also by the women's share in the decision-making process (Bartley et al., 2005). A large body of research supports the interplay between gender ideologies, amount of time availability (time budget), and resource dependence on the perception of fairness in the division of HL (Braun et al., 2008; Carriero & Todesco, 2017; Davis & Greenstein, 2009; Greenstein, 1996; Lavee & Katz, 2002). Additionally, research suggests that women tend to channel frustration with

housework towards dissatisfaction with house cleanliness rather than directing this frustration toward their husbands (Ferree, 1980; Pleck, 1985; Robinson & Milkie, 1998; Spitze, 1988).

Within dual-earner family structures and egalitarian couples, women associated the level of support they receive with the equity in the division of HL (Claffey & Mickelson, 2008). Women (with or without children) who perceived more inequity in the division of HL experienced lower marital satisfaction and personal happiness compared to women with more egalitarian load of HL. In fact, the most contributing factors to this perceived fairness among women were the husband's involvement in tasks typically assigned to women and the amount of appreciation communicated on their husband's part (Claffey & Mickelson, 2008; Lavee & Katz, 2002; Lively et al., 2010).

Research in the 1990s suggested that this perception of inequity and its impact on psychological distress does not have an equal effect on women with more traditional ideologies or within more traditional household structures (Bird, 1999; Blair & Johnson, 1992; Greenstein, 1996). However, given the tremendous ideological, social, and political change that has occurred over the past decades, more recent investigation is needed to determine the applicability of that conclusion on modern day women.

Present Study

Generally, there is limited research focusing on psychology, mental health, and wellbeing in the Middle East (Ramady, 2016). Due to the patriarchal hegemony in the MENA region, there is an even smaller body of research focusing on women's issues, specifically in this region. Taken together, the status of women in society and specifically in research-related careers help to explain the mechanisms behind the dearth of research on women's issues in the MENA region (Barsoum, 2019; Islam, 2019; UNESCO Institute of Statistics, 2019). In addition, to this day,

reports on the division of HL in the Middle East have not been measured in a reliably quantifiable manner. Data has been collected and analyzed within national surveys that briefly and narrowly assess gender roles and the division of HL; however, there has not been concentrated efforts towards accurately measuring the division of HL using reliable scales. Needless to say, assessing psychological distress among MENA women due to gendered HL has also not been addressed in the literature so far.

The purpose of this study was to examine the impact of gendered division of HL on stress, depression, and anxiety among Middle Eastern women. Furthermore, I aimed to assess the resulting psychological distress from a cross-cultural perspective by comparing samples from the Middle East to their Western counterparts in North America. Such comparative analysis has not been made before. Hence, given the previously mentioned difference in gender roles ideology between both cultures, I predicted that the results would indicate higher levels of psychological distress among MENA women.

Measures & Procedures

Participants

The study was approved by the University of Texas at Tyler's Institutional Review Board. Participants completed the survey electronically via Qualtrics, and they had the choice of completing the survey either in English or Arabic. Recruitment occurred through social media platforms. Data collection in the Middle East was further progressed through intensive data collection in Egypt as a country that is representative of Middle Eastern populations (ranks 8th of 19 MENA countries in GGG Index ranking by region, 2020). The survey included a total of 88 questions and took an average of 15 – 20 minutes to complete. Participants were incentivized to complete the survey with a chance to win one of four \$25 gift cards. The sample size was

estimated based on sample sizes used in previous studies employing in-depth survey methodologies with cross-cultural samples.

For participants to take the survey, they had to provide their consent through a multiple-choice question asking them to choose to agree or disagree to participate in the study, and they had to be 18 years or older. We recruited 816 participants ($N= 816$). 269 participants identified as male; 513 identified as females; 4 identified as non-binary; and 30 participants did not provide their gender. 475 participants were in an opposite-sex marriage; 119 participants were in a relationship; 155 participants were single; 36 participants were in a same-sex marriage; and 31 participants did not provide their marital status. 388 participants were from the Middle East; 279 participants were from North America; 2 participants were from North America with Middle Eastern descent, and 147 participants were from other regions.

There were several inclusion criteria for the final sample for analysis: participants had to be either from a North American country or a Middle Eastern country; they had to be in an opposite-sex marriage; and they had to identify as either male or female. They also had to pass two of three attention screeners (see Appendices). After disqualifying those who did not meet the criteria, the total sample size was 284. 203 participants were from the Middle East, and 81 participants were from North America. 104 participants were males, and 180 participants were females.

Participants were classified into two groups: North American and Middle Eastern. This classification was done if two or more of the following criteria were met: (1) the participant's stated nationality; (2) if they stated that they were born in a country that belonged to either of these two groups and has resided there for more than 10 years; or (3) that their parents or grandparents were born in the same country they were born.

Scales & Procedures

Informed Consent and Demographics

Participants provided their informed consent (Appendix A) and answered 22 demographic questions (Appendix B). Based on their marital status and the number of children they reported, they were shown either the household labor scale (HLS) only or both the HLS and the childcare scale (CCS).

Life Satisfaction, Marriage Satisfaction, and Partner Satisfaction

Participants rated their life satisfaction, their satisfaction with their marriage life, and their satisfaction with their partner on a scale from 1 to 5 (5 being the most satisfied). Participants were able to report in increments of 0.5.

Depression, Anxiety, and Stress Scales

The participants completed (1) the Patient Health Questionnaire – 9 items (PHQ-9) to measure their depression levels; (2) the Generalized Anxiety Disorder Screener (GAD-7) to measure their anxiety levels; and (3) the Perceived Stress Scale – 10 items (PSS-10) to measure their stress levels. All three scales have been validated in previous studies in both English and Arabic (Almadi et al., 2012; Baik et al., 2019; Kroenke et al., 2001; Löwe et al., 2008; Sawaya et al., 2016).

Division of Household Labor Scale

Next, participants were asked to answer 30 questions that measure (a) the division of HL and childcare (CC)—if applicable—; (b) how satisfied the participant is with the standards of cleanliness and/or organization within their household; and c) participants' perceptions of the fairness of their division of labor.

As reviewed by Lachance and Bouchard (2010), previous studies have relied on collecting and analyzing data from questions that address this topic within national surveys of much broader scopes. Alternatively, studies relied on self-reported time diaries, estimates of percentage of work done by self or partner, or through ordinal scales. However, there has not been a unified scale to measure division of HL in the literature; each study developed its unique questionnaire. In her thesis, Lane (2014) devised the “Who Does What?” scale that has a semi-structured approach in addressing the specific nature of each family’s division of HL.

The scale used in this study (Appendix C) is derived from merging and modifying the “Who Does What?” scale and the scale used by the International Social Survey Programme (Lomazzi & Seddig, 2020; Scholz et al., 2014). Certain questions were removed because they were either duplicated, not culturally appropriate to the Middle East, or they were beyond the scope of the study. Other questions were modified to preserve the brevity of the questionnaire.

The household labor scale (HLS) included house chores that needed to be done daily or weekly as opposed to irregular household chores which included chores that either had no specific frequency (like house repairs) or that recurred on monthly basis (like handling bills). The reason I made the division accordingly was to differentiate between tasks that have low schedule control and tasks that have high schedule control. Tasks on the HLS all fall under the “low schedule control” category. Participants rated their share of the responsibility for each item on a 5-point Likert scale: Always me (4 points), Mostly me (3 points), Equally divided (2 points), Mostly my spouse (1 point), Always my spouse (0 points). If neither the participant nor the spouse performed the task, they chose a 6th option: “Other/Help” (0 points). Basically, the larger one’s share of regular household responsibility is, the higher their score is on the HLS.

Results

Data Analysis Overview

Data analysis proceeded in several steps. First, I ran a descriptive analysis to explore the total scores on the scales and questionnaire used across gender and region. Next, I used a multivariate analysis of variance (MANOVA) to compare HL, CC, stress, depression, and anxiety levels across regions. After that, I used a series of a multiple linear regression (MLR) analyses to examine the relationship between the division of household labor and stress, depression, and anxiety levels, controlling for gender and region. Finally, I examined the associations among the division of household labor and stress, depression, and anxiety levels using a series of bivariate correlations.

Comparing Outcome Variables, by Gender and Region

Household Labor

As shown in Table 3, a descriptive analysis showed a higher average score for household labor (HLS) among women in the Middle East ($M = 19.4$, $SD = 5.55$) than among women in North America ($M = 18.6$, $SD = 4.42$). Greater difference was evident in childcare responsibility (CC); the average score for women in MENA ($M = 30.5$, $SD = 6.87$) was higher than that of women in North America ($M = 23.8$, $SD = 12.4$). On the other hand, men in North America contributed more in HL ($M = 11.8$, $SD = 4.99$) than men in the Middle East ($M = 9.70$, $SD = 4.73$). They also contributed more in CC ($M = 14.7$, $SD = 7.51$) than men in the Middle East ($M = 12.4$, $SD = 6.29$). Adding both scales together resulted in comparable outcomes. The average score for HLS and CCS combined among women in the Middle East ($M = 49.9$, $SD = 9.74$) was higher than among women in North America ($M = 42.6$, $SD = 14.2$), and the average score for

HLS and CCS combined among men in the Middle East ($M = 21.5$, $SD = 9.71$) was lower than among men in North America ($M = 26.3$, $SD = 11.3$).

Next, I ran a MANOVA to examine the effect of gender and region on the division of HL and CC (see Table 4). The multivariate result showed that the interaction between gender and region, Pillai's Trace = .06, $F(2, 228) = 6.70$, $p = .001$, was significant. The multivariate result for gender, Pillai's Trace = .56, $F(2, 228) = 146.67$, $p < .001$, and region, Pillai's Trace = 0.05, $F(2, 228) = 5.95$, $p = .003$ indicate a difference in the amount of HL and CC done between men and women and between MENA and North America. The univariate F tests showed there was a marginal statistically significant interaction between the effects of gender and region on HL, $F(1, 229) = 3.84$, $p = .051$ and significant interaction between the effects of gender and region on CC, $F(1, 229) = 12.65$, $p < .001$. Simple main effects analysis showed that females did significantly more HL, $F(1, 229) = 188.36$, $p < .001$, and more CC, $F(1, 229) = 197.39$, $p < .001$, than males. There was no significant difference between regions for HL, $F(1, 229) = 0.36$, $p = .55$; however, there was a statistically significant difference between regions on CC, $F(1, 229) = 9.30$, $p = .003$.

I ran an analysis of variance (ANOVA) to examine the effect of region on gender on HL+CC (see Table 5). Results showed that the effect of the interaction between gender and region on HL+CC was also significant, $F(1,229) = 12.85$, $p < .001$. The results also showed that the effect of gender was significant, $F(1,229) = 177.96$, $p < .001$, but the effect of region was not significant, $F(1,229) = 0.56$, $p = .45$. Post hoc analyses using the Tukey LSD post hoc criterion for significance indicated that women overall completed more domestic labor (HL + CC) than men did across regions.

Most notably, within the female sample, a set of independent t-tests showed great significance when comparing CC across regions. An independent *t*-test showed that women in

MENA do a significantly higher amount of childcare ($M = 30.5$, $SD = 6.87$) than women in North America ($M = 23.8$, $SD = 12.4$), $t(143) = 4.14$, $p < .001$ (see Figure 1).

Stress, Depression, and Anxiety

As shown in Table 3, a descriptive analysis showed that women in the Middle East had a higher average score for depression (PHQ) ($M = 7.81$, $SD = 5.52$) than among women in North America ($M = 6.40$, $SD = 5.65$). They had a higher average score for anxiety (GAD) ($M = 7.44$, $SD = 4.98$) than women in North America ($M = 5.66$, $SD = 4.94$). They had a higher average score for stress (PSS) ($M = 19.4$, $SD = 6.43$) than among women in North America ($M = 16.6$, $SD = 7.04$). Men in the Middle East had a lower average score for depression ($M = 6.66$, $SD = 4.37$) than men in North America ($M = 6.83$, $SD = 4.66$). However, men in the Middle had a higher average score for anxiety ($M = 6.64$, $SD = 4.43$) than men in North America ($M = 5.39$, $SD = 4.11$). They had a higher average score for stress ($M = 18$, $SD = 6.61$) than men in North America ($M = 16.3$, $SD = 5.69$).

A MANOVA analyses was conducted to compare levels of stress (PSS-10), depression (PHQ-9), and anxiety (GAD-7) as DVs across gender and region as IVs (see Table 6).

Multivariate results were significant across regions, Pillai's Trace = 0.034, $F(3, 270) = 3.18$, $p = 0.024$. However, they were not significant across gender, Pillai's Trace = 0.004, $F(3, 270) = 0.36$, $p = 0.78$, or in the interaction between gender and region, Pillai's Trace = 0.004, $F(3, 270) = 0.37$, $p = 0.76$.

Univariate results were only significant for anxiety across regions, $F(1, 272) = 6.48$, $p = .011$, and stress levels across regions, $F(1, 272) = 7.27$, $p = .007$. Anxiety levels were higher in MENA ($M = 7.12$, $SD = 4.77$) than in North America ($M = 5.58$, $SD = 4.69$), and stress levels were higher in MENA ($M = 18.82$, $SD = 6.52$) than in North America ($M = 16.5$, $SD = 6.66$).

Impact of Household Labor on Psychological Wellbeing

Stress

To examine the effects of differentiated household labor on stress, I conducted two hierarchical linear regression analyses (see Table 7). In the first analysis, I entered region and gender as predictors of stress in the first block, and then HLS as the predictor in the second block. Scores on the PSS-10 were the dependent variable. Overall, the addition of gendered household labor in step two of the model significantly increased the predictive ability of the regression model, $R^2 \Delta = .02$, $F(1, 272) = 6.72$, $p = .010$. Once the impacts of both gender and region had been accounted for in step one, household division of labor significantly predicted stress, $\beta = .20$, $p = .010$. That is, across regions and genders, the more household labor one does, the more their stress levels are likely to increase.

To examine the impact of time spent on HL and CC on stress, I conducted a second hierarchical regression analysis (see Table 8). For this analysis, the total score on HLS and CCS combined (HLS+CCS) was entered as a predictor in step two. Overall, the addition of the HLS+CCS variable significantly added to the predictive ability of the model, $R^2 \Delta = .03$, $F(1, 227) = 7.14$, $p = .008$. Once the impacts of both gender and region had been accounted for in step one, time spent on HL and CC significantly predicted stress levels, $\beta = .11$, $p = .008$. That is, across regions and genders, as the amount of time spent on housechores and childcare increases, stress levels are likely to increase significantly.

Depression

To examine the effects of differentiated household labor on depression, we conducted a hierarchical linear regression (see Table 9). I entered region and gender as predictors of depression in the first block, and then HLS as the predictor in the second block. Scores on the

PHQ-9 were the dependent variable. Overall, the addition of gendered household labor in step two of the model significantly increased the predictive ability of the regression model, $R^2 \Delta = .06$, $F(1, 270) = 18$, $p < .001$. Once the impacts of both gender and region had been accounted for in step one, household division of labor significantly predicted depression, $\beta = .26$, $p < .001$. That is, across regions and genders, as the amount of gendered household labor one does increases, depression levels are likely to increase significantly.

To examine the impact of time spent on HL and CC on depression, I conducted a second hierarchical regression analysis (see Table 10). For this analysis, the total score of HLS+CCS was entered as a predictor in step two. Overall, the addition of the HLS+CCS variable significantly added to the predictive ability of the model, $R^2 \Delta = .03$, $F(1, 226) = 7.35$, $p = .007$. Once the impacts of both gender and region had been accounted for in step one, time spent on childcare significantly predicted stress levels, $\beta = .09$, $p = .007$. That is, across regions and genders, as the amount of time spent on housechores and childcare increases, depression levels are likely to increase significantly.

Anxiety

To examine the effects of differentiated household labor on anxiety, I conducted a hierarchical linear regression (see Table 11). I entered region and gender as predictors of anxiety in the first block, and then HLS as the predictor in the second block. Scores on the GAD-7 were the dependent variable. Overall, the addition of gendered household labor in step two of the model significantly increased the predictive ability of the regression model, $R^2 \Delta = .07$, $F(1, 269) = 19.1$, $p < .001$. Once the impacts of both gender and region had been accounted for in step one, household division of labor significantly predicted stress, $\beta = .243$, $p < .001$. That is, across

regions and genders, as the amount of gendered household labor one does increases, anxiety levels are likely to increase significantly.

To examine the impact of time spent on HL and CC on anxiety, we conducted a second hierarchical regression analysis (see Table 12). For this analysis, the total score of HLS+CCS was entered as a predictor in step two. Overall, the addition of HLS+CCS variable significantly added to the predictive ability of the model, $R^2 \Delta = .03$, $F(1, 225) = 6.01$, $p = .015$. Once the impacts of both gender and region had been accounted for in step one, time spent on childcare significantly predicted stress levels, $\beta = .07$, $p = .015$. That is, across regions and genders, as the amount of time spent on housechores and childcare increases, anxiety levels will likely increase significantly.

Correlation Between Household Labor and Psychological Distress

Lastly, I examined whether HL and CC correlate with stress, depression, and anxiety using a bivariate correlation (see Table 13). Results of the Pearson correlation indicated that there was a weak, yet significant, positive association between HL and depression, ($r(273) = .227$, $p < .001$) and between HL and anxiety, ($r(272) = .223$, $p < .001$). There was a very weak, but still significant, correlation between HL and stress ($r(275) = .156$, $p = .009$). Results of the Pearson correlation indicated a very weak, yet significant, positive association between CC and stress, ($r(230) = .154$, $p = .019$). Combining HL and CC showed a very weak, but significant, correlation with depression, ($r(229) = 0.153$, $p = .020$); with anxiety ($r(228) = 0.151$, $p = .022$); and with stress ($r(230) = 0.156$, $p = .018$).

While CC was not associated with depression and anxiety within the total sample, as shown in Table 14, within the female sample, there was a moderate correlation between HL and depression ($r(115) = .0364$, $p < .001$) and between HL and anxiety ($r(112) = .0358$, $p < .001$).

There was a weak, yet significant, correlation between HL and stress ($r(116) = 0.245, p = .007$). There was weak to moderate correlation between CC and depression ($r(97) = .285, p = .004$). Combining HL and CC showed a weak to moderate correlation with stress, ($r(98) = 0.262, p = .009$). There was a large correlation with anxiety ($r(98) = 0.319, p = .001$); and with depression ($r(97) = 0.404, p < .001$).

The numbers are even more significant among Middle Eastern women who are working full time (see Table 15). Within this population, results indicated a large correlation between HL and depression ($r(47) = 0.484, p < .001$) and CC and depression ($r(37) = .0.483, p = .002$). There was a moderate correlation between HL and anxiety ($r(47) = .0.389, p = .006$). HL+CC is shown to have a very strong correlation with depression ($r(37) = 0.610, p < .001$) and a moderate correlation with anxiety ($r(37) = .0.391, p = .014$).

Discussion

There is limited research focusing on women's issues in the MENA region, specifically, reports on the division of HL in the Middle East have not been measured in a reliably quantifiable manner. Assessing psychological distress among MENA women due to gendered HL has also not been addressed in the literature so far. The purpose of this study was to examine the impact of gendered division of HL on stress, depression, and anxiety among Middle Eastern women. Furthermore, I examined the resulting psychological distress from a cross-cultural perspective by comparing samples from the Middle East to their Western counterparts in North America.

As predicted, higher levels of psychological distress were found in the MENA region than in North America. A MANOVA analysis indicated a significant difference in stress and anxiety levels across regions. Also, as predicted, division of HL was more gendered in the

Middle East than in North America. That is, women in the MENA region were responsible for a larger share of HL than women in North America when childcare is accounted for. Finally, as predicted, gendered division of household labor was associated with higher levels of psychological distress among women. Looking across regions, there was a moderate association between HL and psychological distress among Middle Eastern women. HL and childcare combined were strongly associated with higher levels of depression among working mothers in the MENA region. The association was very weak, yet significant, among women in North America. There was no correlation between HL and psychological distress among males.

Limitations and Future Directions

Limitations to this study included an unequal sample size across regions, which resulted in higher variance. Hence, future studies could aim towards a comparable sample size across regions. In addition, data was collected electronically via social media, which reflects a minimum socioeconomic status. As a result, my data may be slightly skewed towards a certain demographic population and may not represent an accurate reflection of the reality. Therefore, it is important to explore ways to reach underprivileged populations that may not be accessible electronically. Particularly, exploring the role of income, education, and perceived fairness on the scores on the HLS and CCS could shed light on other uncovered mediating factors. Whether the direction of such expansion would indicate more gendered HL or less gendered HL is yet to be determined. Additional limitations include the presence of a global pandemic (COVID-19) that could be contributing to increased psychological distress in general, and not solely as a result of HL or CC. It is thus crucial to replicate that study at a time when such historical markers are absent to further validate the results. Limited studies have quantified HL before. Future studies can, thus, explore the validity and reliability of the HLS. In addition, it would be interesting to

find if there is a turning point in the HLS score after which psychological distress becomes significantly evident. Exploring how HL impact life, marriage, and partner satisfaction is another future direction for this study.

Conclusion

This study helps shed light on the overlooked issue of gendered household labor and its impact on psychological wellbeing. Especially in the Middle East, neopatriarchy has overburdened women with a much larger load of work within and without the household; women are expected to seek independence and contribute to the household financially and still continue to carry most—if not all—of the housework load. Working mothers in that region are impacted the most, even beyond the common gender inequality present across the globe. Between work commitments and childcare, working Middle Eastern mothers are stretched beyond their limits to prove themselves as equal to men in the workplace and as highly competent mothers at home. The cross-cultural perspective underscores how gendered household labor is still prevalent across cultures. The contrast, however, further highlights the graver struggle present in the Middle East. My aim is to direct future research toward promoting a more equitable share of household labor that will foster improved psychological wellbeing.

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Table 1*Economic Participation & Opportunity from GGG Index Report 2020*

<i>Ranking</i>	<i>Country</i>	<i>Region</i>
2	Iceland	Western Europe
11	Norway	Western Europe
16	Sweden	Western Europe
18	Finland	Western Europe
26	United States of America	North America
30	Canada	North America
36	Switzerland	Western Europe
41	Denmark	Western Europe
43	Ireland	Western Europe
46	Portugal	Western Europe
48	Germany	Western Europe
50	Luxembourg	Western Europe
54	Belgium	Western Europe
58	United Kingdom	Western Europe
60	Netherlands	Western Europe
65	France	Western Europe
67	Israel	MENA
72	Spain	Western Europe
73	Cyprus	Western Europe
86	Austria	Western Europe
117	Italy	Western Europe
120	Kuwait	MENA
132	Qatar	MENA
133	Bahrain	MENA
136	Turkey	MENA
137	United Arab Emirates	MENA
138	Algeria	MENA
139	Lebanon	MENA
140	Egypt	MENA
142	Tunisia	MENA
143	Oman	MENA
144	Mauritania	MENA
145	Jordan	MENA
146	Morocco	MENA
147	Iran	MENA
148	Saudi Arabia	MENA
151	Yemen	MENA
153	Syria	MENA

Table 2*Political Empowerment from GGG Index Report 2020*

Ranking	Country	Region
1	Iceland	Western Europe
2	Norway	Western Europe
5	Finland	Western Europe
8	Spain	Western Europe
9	Sweden	Western Europe
11	Ireland	Western Europe
12	Germany	Western Europe
15	France	Western Europe
17	Denmark	Western Europe
19	Switzerland	Western Europe
20	United Kingdom	Western Europe
25	Canada	North America
30	Austria	Western Europe
34	Belgium	Western Europe
39	Portugal	Western Europe
40	Netherlands	Western Europe
44	Italy	Western Europe
64	Israel	MENA
66	Luxembourg	Western Europe
67	Tunisia	MENA
72	Mauritania	MENA
75	United Arab Emirates	MENA
86	United States of America	North America
99	Algeria	MENA
103	Egypt	MENA
109	Turkey	MENA
111	Cyprus	Western Europe
113	Jordan	MENA
123	Morocco	MENA
130	Syria	MENA
136	Saudi Arabia	MENA
138	Bahrain	MENA
142	Kuwait	MENA
143	Qatar	MENA
145	Iran	MENA
149	Lebanon	MENA
150	Oman	MENA
151	Yemen	MENA

Table 3*Descriptives*

	Gender	Region	HL	CCS	HLS+CCS	PHQ	GAD	PSS
Mean	Female	Middle East	19.4	30.5	49.9	7.81	7.44	19.4
		North America	18.6	23.8	42.6	6.40	5.66	16.6
	Male	Middle East	9.70	12.4	21.5	6.66	6.64	18.0
		North America	11.8	14.7	26.3	6.83	5.39	16.3
Median	Female	Middle East	20.0	30.0	48.5	7.00	6.00	20.0
		North America	18.0	25.0	43.0	5.00	4.50	17.0
	Male	Middle East	9.00	13.0	21.0	6.00	6.00	19.0
		North America	13.0	16.0	27.0	8.00	4.00	17.5
Standard deviation	Female	Middle East	5.55	6.87	9.74	5.52	4.98	6.43
		North America	4.42	12.4	14.2	5.65	4.94	7.04
	Male	Middle East	4.73	6.29	9.71	4.37	4.43	6.61
		North America	4.99	7.51	11.3	4.66	4.11	5.69
Range	Female	Middle East	25.0	33.0	41.0	26.0	21.0	33.0
		North America	17.0	40.0	55.0	27.0	19.0	29.0
	Male	Middle East	22.0	26.0	41.0	18.0	21.0	33.0
		North America	21.0	34.0	55.0	14.0	13.0	23.0

Table 4*Effect of Gender & Region on HL & CC - Multivariate Tests*

		value	F	df1	df2	p
Gender	Pillai's Trace	0.5627	146.67	2	228	< .001
Region	Pillai's Trace	0.0496	5.95	2	228	0.003
Gender * Region	Pillai's Trace	0.0555	6.70	2	228	0.001

Effect of Gender & Region on HL & CC - Univariate Tests

	Dependent Variable	Sum of Squares	df	Mean Square	F	p
Gender	HLS	4928.43	1	4928.43	188.355	< .001
	CCS	13107.19	1	13107.19	197.388	< .001
Region	HLS	9.47	1	9.47	0.362	0.548
	CCS	617.69	1	617.69	9.302	0.003
Gender * Region	HLS	100.41	1	100.41	3.837	0.051
	CCS	839.88	1	839.88	12.648	< .001
Residuals	HLS	5991.94	229	26.17		
	CCS	15206.32	229	66.40		

Table 5*Effect of Gender & Region on HLS and CC Combined*

	Sum of Squares	df	Mean Square	F	p
Gender	21064.7	1	21064.7	177.961	< .001
Region	66.4	1	66.4	0.561	0.454
Gender * Region	1521.1	1	1521.1	12.851	< .001
Residuals	27106.1	229	118.4		

Table 6*Effect of Gender & Region on Stress, Depression, and Anxiety - Multivariate Tests*

		value	F	df1	df2	p
Gender	Pillai's Trace	0.00396	0.358	3	270	0.783
Region	Pillai's Trace	0.03414	3.181	3	270	0.024
Gender * Region	Pillai's Trace	0.00431	0.390	3	270	0.760

Effect of Gender & Region on Stress, Depression, and Anxiety - Univariate Tests

	Dependent Variable	Sum of Squares	df	Mean Square	F	p
Gender	PHQ	25.51	1	25.51	0.956	0.329
	GAD	9.14	1	9.14	0.402	0.526
	PSS	30.07	1	30.07	0.694	0.406
Region	PHQ	46.93	1	46.93	1.759	0.186
	GAD	147.00	1	147.00	6.476	0.011
	PSS	315.06	1	315.06	7.271	0.007
Gender * Region	PHQ	26.36	1	26.36	0.988	0.321
	GAD	4.36	1	4.36	0.192	0.661
	PSS	10.58	1	10.58	0.244	0.622
Residuals	PHQ	7256.28	272	26.68		
	GAD	6174.57	272	22.70		
	PSS	11786.65	272	43.33		

Table 7*Effect of HL on Stress, Controlling for Gender and Region*

Model	R	R ²
1	0.180	0.0324
2	0.236	0.0557

Comparison							
Model		Model	ΔR^2	F	df1	df2	p
1	-	2	0.0233	6.72	1	272	0.010

Predictor	Estimate	SE	t	p
Model Coefficient 1 – PSS				
Intercept ^a	19.38	0.609	31.834	< .001
Gender:				
Male – Female	-1.38	0.961	-1.437	0.152
Region:				
North America – Middle East	-2.81	1.061	-2.652	0.008
Gender * Region:				
(Male – Female) * (North America – Middle East)	1.13	1.915	0.590	0.555
Model Coefficient 2 – PSS				
Intercept ^a	15.454	1.6307	9.477	< .001
Gender:				
Male – Female	0.582	1.2163	0.478	0.633
Region:				
North America – Middle East	-2.650	1.0515	-2.520	0.012
Gender * Region:				
(Male – Female) * (North America – Middle East)	0.547	1.9084	0.287	0.775
HLS	0.203	0.0782	2.592	0.010

^a Represents reference level

Table 8*Effect of HL & CC on Stress, Controlling for Gender and Region*

Model	R		R ²					
1	0.178	0.0318						
2	0.248	0.0614						
Comparison								
Model	Model	ΔR ²	F	df1	df2	p		
1	-	2	0.0295	7.14	1	227	0.008	
Predictor					Estimate	SE	t	p
Model Coefficient 1 - PSS								
Intercept ^a					19.21	0.669	28.714	< .001
Gender:								
Male – Female					-1.02	1.056	-0.962	0.337
Region:								
North America – Middle East					-3.10	1.201	-2.580	0.010
Gender * Region:								
(Male – Female) * (North America – Middle East)					1.70	2.085	0.818	0.414
Model Coefficients - PSS_Total								
Intercept ^a					13.864	2.1071	6.580	< .001
Gender:								
Male – Female					2.022	1.5424	1.311	0.191
Region:								
North America – Middle East					-2.321	1.2203	-1.902	0.058
Gender * Region:								
(Male – Female) * (North America – Middle East)					0.443	2.1112	0.210	0.834
HLS+CCS					0.107	0.0401	2.672	0.008

Model Coefficients - PSS_Total

^a Represents reference level

Table 9

Effect of HL on Depression, Controlling for Gender and Region

Model	R	R ²
1	0.119	0.0142
2	0.275	0.0757

Comparison						
Model	Model	ΔR ²	F	df1	df2	p
1	- 2	0.0615	18.0	1	270	< .001

Predictor	Estimate	SE	t	p
Model Coefficient 1 - PHQ				
Intercept ^a	7.87	0.479	16.42	< .001
Gender:				
Male – Female	-1.07	0.761	-1.40	0.162
Region:				
North America – Middle East	-1.48	0.833	-1.77	0.078
Gender * Region:				
(Male – Female) * (North America – Middle East)	1.50	1.487	1.01	0.315
Model Coefficient 2 - PHQ				
Intercept ^a	2.928	1.2559	2.331	0.020
Gender:				
Male – Female	1.409	0.9412	1.497	0.136
Region:				
North America – Middle East	-1.280	0.8090	-1.582	0.115
Gender * Region:				
(Male – Female) * (North America – Middle East)	0.748	1.4532	0.515	0.607

Model	R	R ²			
HLS			0.255	0.0603	4.238
					< .001

^a Represents reference level

Table 10

Effect of HL & CC on Depression, Controlling for Gender and Region

Model	R	R ²
1	0.123	0.0150
2	0.215	0.0461

Comparison							
Model		Model	ΔR^2	F	df1	df2	p
1	-	2	0.0310	7.35	1	226	0.007

Predictor	Estimate	SE	t	p
Model Coefficients 1 - PHQ				
Intercept ^a	7.788	0.536	14.52	< .001
Gender:				
Male – Female	-0.864	0.848	-1.02	0.310
Region:				
North America – Middle East	-1.743	0.959	-1.82	0.070
Gender * Region:				
(Male – Female) * (North America – Middle East)	1.962	1.646	1.19	0.234

Model Coefficients 2 - PHQ

Intercept ^a	3.4624	1.6809	2.060	0.041
Gender:				
Male – Female	1.6009	1.2353	1.296	0.196
Region:				
North America – Middle East	-1.1201	0.9738	-1.150	0.251
Gender * Region:				

(Male – Female) * (North America – Middle East)	0.9165	1.6682	0.549	0.583
HLS+CCS	0.0869	0.0320	2.711	0.007

^a Represents reference level

Table 11

Effect of HL on Anxiety, Controlling for Gender and Region

Model	R	R ²
1	0.167	0.0278
2	0.304	0.0922

Comparison						
Model	Model	ΔR ²	F	df1	df2	p
1	- 2	0.0645	19.1	1	269	<.001

Predictor	Estimate	SE	t	p
Model Coefficient 1 - GAD				
Intercept ^a	7.500	0.447	16.780	<.001
Gender:				
Male – Female	-0.791	0.699	-1.132	0.258
Region:				
North America – Middle East	-1.845	0.770	-2.397	0.017
Gender * Region:				
(Male – Female) * (North America – Middle East)	0.527	1.368	0.385	0.700
Model Coefficient 2 – GAD				
Intercept ^a	2.783	1.1627	2.393	0.017
Gender:				
Male – Female	1.569	0.8654	1.813	0.071
Region:				
North America – Middle East	-1.646	0.7465	-2.205	0.028
Gender * Region:				

Model	R	R ²		
(Male – Female) * (North America – Middle East)	-0.189	1.3343	-0.142	0.887
HLS	0.243	0.0556	4.371	< .001

Table 12*Effect of HL & CC on Anxiety, Controlling for Gender and Region*

Model	R	R ²
1	0.191	0.0364
2	0.248	0.0615

Comparison							
Model	Model	ΔR ²	F	df1	df2	p	
1	-	2	0.0251	6.01	1	225	0.015

Predictor	Estimate	SE	t	p
Model Coefficient 1 - GAD				
Intercept ^a	7.588	0.489	15.501	< .001
Gender:				
Male – Female	-0.812	0.766	-1.060	0.290
Region:				
North America – Middle East	-2.388	0.870	-2.746	0.007
Region * Gender:				
(North America – Middle East) * (Male – Female)	1.326	1.487	0.892	0.373

Model Coefficient 2 - GAD				
Intercept ^a	4.0269	1.5306	2.631	0.009
Gender:				
Male – Female	1.2139	1.1207	1.083	0.280
Region:				
North America – Middle East	-1.8654	0.8860	-2.105	0.036
Region * Gender:				
(North America – Middle East) * (Male – Female)	0.4650	1.5116	0.308	0.759
HLS+CCS	0.0713	0.0291	2.452	0.015

^a Represents reference level

Model	R	R ²
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Table 13

HL, CC & Psychological Distress Across Genders and Regions

		HLS	CCS	HLS+CCS
PHQ	Pearson's r	0.227 ***	0.106	0.153 *
	p-value	< .001	0.108	0.020
	N	275	231	231
GAD	Pearson's r	0.223 ***	0.096	0.151 *
	p-value	< .001	0.148	0.022
	N	274	230	230
PSS	Pearson's r	0.156 **	0.154 *	0.156 *
	p-value	0.009	0.019	0.018
	N	277	232	232

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 14*HL, CC & Psychological Distress – Female Sample Across Regions*

		HLS	CCS	HLS+CCS
PHQ_Total (2)	Pearson's r	0.364 ***	0.285 **	0.404 ***
	p-value	< .001	0.004	< .001
	N	117	99	99
PSS_Total	Pearson's r	0.245 **	0.168	0.262 **
	p-value	0.007	0.096	0.009
	N	118	100	100
GAD_Total	Pearson's r	0.358 ***	0.161	0.319 ***
	p-value	< .001	0.115	0.001
	N	114	97	97

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

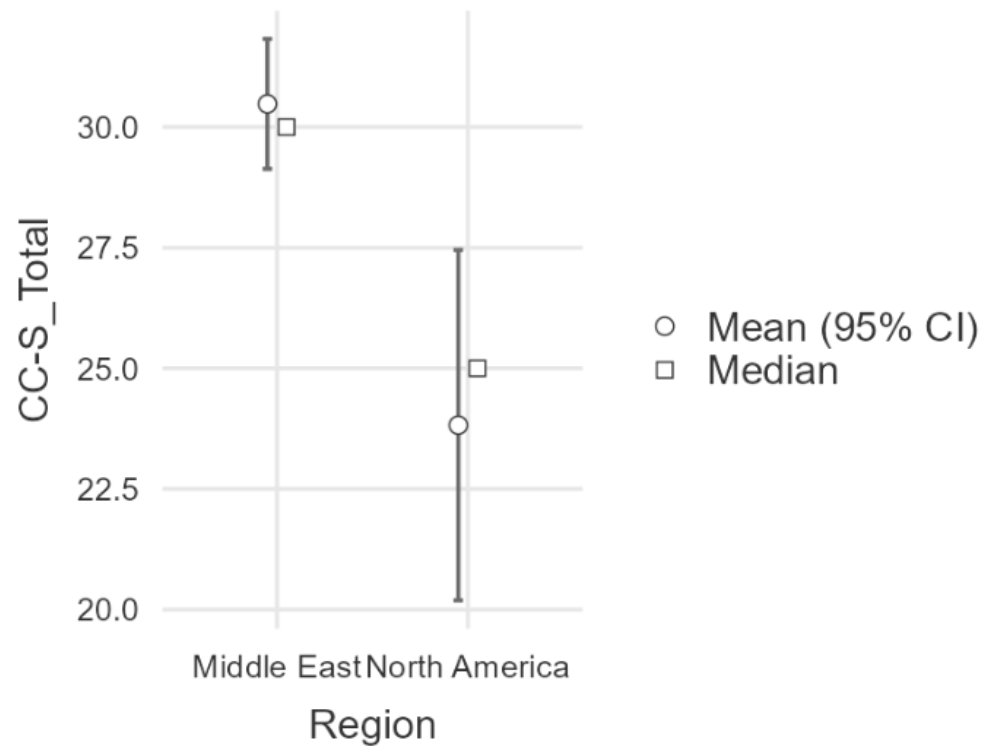
Table 15*HL, CC & Psychological Distress – Working Women in MENA*

		HLS	CCS	HLS+CCS
PHQ	Pearson's r	0.484 ***	0.483 **	0.610 ***
	p-value	< .001	0.001	< .001
	N	49	39	39
PSS	Pearson's r	0.177	0.216	0.275
	p-value	0.225	0.186	0.090
	N	49	39	39
GAD	Pearson's r	0.389 **	0.231	0.391 *
	p-value	0.006	0.156	0.014
	N	49	39	39

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1

Scores on Childcare Scale Among Women Across Regions



Appendix A: Informed Consent

THE UNIVERSITY OF TEXAS AT TYLER

Informed Consent to Participate in Research

IRB Approval #: IRB-FY2021-166

Approval Date: June 4th, 2021

You have been invited to participate in a study on the division of household labor among married couples. Your participation is completely voluntary, confidential, and anonymous.

You must be 18 years or older to participate in this study.

If you agree to participate in this study, you will be asked:

- To provide general information about yourself.
- To answer questions about your current experiences within your household.
- If you would like to enter a raffle draw for a chance to win a \$25 Amazon e-gift card. If you choose to do so, you will be asked to provide your contact information.

Risks of Participating:

Answering questions may cause some distress or mental fatigue. If at any point you feel uncomfortable, you may stop participating at any time. Please contact the main researchers if you have any questions about the study. The contact information for the main researchers is below.

Benefits of Participating:

Participating in this study may provide insight and contribute to future research on the division of household labor and how it impacts psychological wellbeing. Finally, by completing this survey, you have the chance to win a \$25 e-gift card.

Confidentiality:

All information collected from this study will be kept private and safe. Your contact information (if provided by choice) and IP address are the only personal information that will be collected. It will not be possible to identify you in any publications or presentations. All identifying information will be kept separate from your answers given in the study. Your answers will not be linked to your contact information. Only the main researchers will have access to your contact information—if provided—only to inform you if you win the gift card or if you ask to be contacted.

If I have any questions about this study, I will contact one of the main researchers:

Rawda Tomoum

Email: rtomoum@patriots.uttyler.edu

If I have any questions about my rights as a participant, I will contact:

Dr. Amy Hayes, Chair, Department of Psychology and Counseling, The University of Texas at

Tyler at ahayes@uttyler.edu **OR** Dr. David Pearson, Chair of the UT Tyler Institutional Review Board at dpearson@uttyler.edu, or 903-565-5858.

Appendix B: Demographic Items

1. Age
2. Gender
3. Highest level of education
4. Marital status
5. Year of marriage
6. Number of children
7. Number of people you care for (regardless of age)
8. Employment status
9. Source of income
10. Monthly income
11. Spouse's monthly income
12. How financial contribution is divided
13. Place of birth
14. Grandparents' place of birth
15. Nationality
16. Country of residence
17. Duration of living in country of residence
18. Race/ethnicity that represents you the most

Appendix C: Life and Relationship Satisfaction

1. How satisfied are you with your relationship with your partner?
2. How satisfied are you with your marriage life?
3. How satisfied are you with your life?

Appendix D: Clinical Scales

Generalized Anxiety Disorder – 7 items (GAD-7)

Please read each statement and indicate how much the statement applied to you *over the past 2 weeks* (Not at all, Several days, More than half the days, Nearly every day).

1. Feeling nervous, anxious or on edge
2. Not being able to stop or control worrying
3. Worrying too much about different things
4. Trouble relaxing
5. Being so restless that it is hard to sit still
6. Becoming easily annoyed or irritable
7. Feeling afraid as if something awful might happen

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all Somewhat difficult Very difficult Extremely difficult

Patient Health Questionnaire – 9 items (PHQ-9)

Please read each statement and indicate how much the statement applied to you *over the past 2 weeks* (Not at all, Several days, More than half the days, Nearly every day).

1. Little interest or pleasure in doing things
2. Feeling down, depressed, or hopeless
3. Trouble falling or staying asleep, or sleeping too much
4. Feeling tired or having little energy
5. Poor appetite or overeating
6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down

7. Trouble concentrating on things, such as reading the newspaper or watching television
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving .around a lot more than usual
9. Thoughts that you would be better off dead or of hurting yourself in some way
10. Please select “Several days”

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all Somewhat difficult Very difficult Extremely difficult

Perceived Stress Scale – 10 items (PSS-10)

In the last month, how often have you experienced the following (Never, Almost never, Sometimes, Fairly often, Very often)?

1. Felt upset because of something that happened unexpectedly?
2. Felt that you were unable to control the important things in your life?
3. Felt nervous and “stressed”?
4. Felt confident about your ability to handle your personal problems?
5. Felt that things were going your way?
6. Please select “Never”
7. Found that you could not cope with all the things that you had to do?
8. Been able to control irritations in your life?
9. Felt that you were on top of things?
10. Been angered because of things that were outside your control?
11. Felt difficulties were piling up so high that you could not overcome them?

Appendix E: Household Ratings & Time Budget

1. Overall, how satisfied would each of following be with the cleanliness of your house?
(Exclude special occasions, when having guests over, etc.)

- Myself: ☆☆☆☆☆
- My spouse: ☆☆☆☆☆
- My parents or my in-laws: ☆☆☆☆☆

2. Overall, approximately how many hours per day are dedicated to the following?

Housechores & childcare:

Paid work:

Leisure and/or self-care:

3. Overall, how are household responsibilities divided between you and your spouse?

I do 100% It's equally divided My spouse does 100%

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

4. I believe the current division of household responsibility is fair.

- Strongly agree
- Somewhat agree
- Neutral
- Somewhat disagree
- Strongly disagree

5. Ideally, how would you divide household responsibility between you and your spouse?

I do 100% It's equally divided My spouse does 100%

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

6. On average, how many days per week do you hire help for house chores or caring for children? (Example: cleaning, babysitting, etc.)

- Once a week
- 2-3 times a week
- 4-6 times a week
- Daily

Appendix F: Division of Household Labor

For each task, please answer using the following rating scale. If neither you nor your partner perform this task, please choose “Other/Help”:

Always me	Mostly me	Equally divided	Mostly my partner	Always my partner	Other/Help
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Housechores

1. Laundry (washing, drying, folding, ironing, sorting)
2. Small house repairs (E.g.: Change light bulbs)
3. Planning grocery lists (or other household needs)
4. Grocery shopping
5. Household cleaning (dusting, vacuuming, mopping, etc.)
6. Cooking meals
7. Cleaning up after meals
8. Taking out the garbage
9. Major house repairs like car maintenance, lawn maintenance, roof repair, etc. (including arranging, requesting, hiring, or supervising handyman)
10. Clerical handling of bills & services like telephone, cables, internet, etc. (This question is NOT asking about who pays for it)
11. Please select “Other/Help”

Childcare

1. Feeding baby (or young children)
2. Changing diapers or bathing children
3. Choosing baby or children’s outfits for school or going out.

4. Getting baby or children ready
5. Responds to baby or children in the middle of the night (crying, nightmares, etc.)
6. Drives children to and from school or daycare
7. Taking children out for a walk, to the park, on play dates, etc.
8. Takes children to practice or hobbies (sports, music, dance, etc.)
9. Arranging for babysitters or childcare
10. Caring for a sick child (attends to needs, medication, doctor's appointment, etc.)