

The effect of marital status on psychological distress among single and partnered mothers in Ghana: The moderating role of employment status

Opoku Mensah, Abigail ✉

University of Cape Coast, Ghana (aopokumensah@ucc.edu.gh)

Asamani, Lebbaeus

University of Cape Coast, Ghana (lebbaeusa@yahoo.com)

Asumeng, Maxwell

University of Ghana, Legon, Ghana (maxasumeng@yahoo.com)



ISSN: 2243-7681
Online ISSN: 2243-769X

OPEN ACCESS

Received: 5 February 2017

Available Online: 10 June 2017

Revised: 8 May 2017

DOI: 10.5861/ijrsp.2017.1755

Accepted: 1 June 2017

Abstract

Literature indicated that generally, one-quarter to one-third of all families are headed by single mothers. In developing countries like Ghana, more than 25% of households are headed by single mothers. This phenomenon could be attributed to increased rate of divorce, desertion, death, and imprisonment. These mothers are confronted with many burdens. The study sought to find out how these burdens affect the level of psychological distress of mothers and whether single and partnered mothers differ on this variable. Some of the factors considered include employment status, family size, and educational level. Data was obtained using questionnaire and structured interview guide from 364 single mothers and 355 partnered mothers using purposive sampling, convenience and the snowball sampling. The design was descriptive survey. Both descriptive and inferential statistics were used for the analyses. There were significant differences between single and partnered mothers, as well as amongst those employed in the formal sector, those employed in the informal sector and the unemployed mothers on psychological distress. A significant negative relationship between the age of mothers and psychological distress was observed. These findings were discussed and intervention programmes recommended.

Keywords: psychological health; women; employment; gender

The effect of marital status on psychological distress among single and partnered mothers in Ghana: The moderating role of employment status

1. Introduction

Parenting in Ghana and the world all over is receiving more focus and has become one of the major topics on talk shows, in the press and on the airwaves. However, empirical research in Ghana seemed to have side-stepped this area, hence the need for this study. Parenthood generally revolves around the biological father and mother of a child, but in most African cultures, the emphasis is often on the role of the father. However, one parent cannot adequately handle the responsibilities of both parents. Unfortunately, the general trend in Ghana today is that more parents continue to neglect their children, with fathers being the worst offenders (Ghana Statistical Service, 2012). Raising a child as a single parent can be challenging. In addition to taking care of the home, the parent might be working or schooling and it is important to balance all these aspects of life. The Children's of Ghana, Act (560) of 1998 states among other things that a parent or any other person who is legally liable to maintain a child is under an obligation to supply the necessities of health, life, education and reasonable shelter for the child. When parents separate, one party usually takes custody of the children.

American Psychological Association (2016) in a paper entitled "single parenting and today's family" indicates that families headed by single-parent have become more common in the past 20 years than the so-called "nuclear family" which consists of the mother, father and children. Single parenthood refers to the situation where only one parent, be it the father or mother, is saddled with the responsibility of a child's upbringing. This situation could occur as a result of divorce, adoption, artificial insemination, surrogate motherhood, child neglect or abandonment by the absentee biological parent. There are also *natural circumstances* where either the father or mother may die, leaving the child or children with the other surviving parent (DePaulo, 2009).

The Ghana Statistical Service (2012) report indicates that female-headed households constitute 34.7 percent. The proportion of male-headed households has been reducing steadily from 71.4 percent in 1970 to 65.3 percent in 2010. As afore-mentioned, parenthood, under normal circumstances should revolve around a child's biological father and mother, but often with emphasis on the role of the father in most cultures (Amato, 2010). Amato observed that when this is disrupted and children have to live with only one parent, it brings a lot of stress and difficulties to the surviving single parent. There have been numerous instances, especially in African society in which valuable properties left behind by a deceased father, who should have been given to his wife and children had been taken by immediate family members, compelling the widowed mother to fend for herself and her children without any support. In some cases, the mother and the children were even driven out of the house left behind by the late husband. The single mothers are therefore confronted with many burdens.

There is a dearth of empirical evidence on the psychological health status of single mothers in Ghana. Apart from losing the benefits of mutual support and companionship of stable marital relations, they have to develop survival strategies to cope with a variety of burdens they face. At present, there are no effective mitigating programme packages for these burdens which, in many cases, weigh very heavily on these separated, divorced or widowed women psychologically (Flint, Bartley, Shelton, & Sacker 2013; Wilk, 2001). According to Diener, Gohn, Suh, and Oishi (2000), married mothers experience high subjective well-being than the married single mothers or never married mothers. Marriage itself presents challenges, but being no more in a marital union, and most often being a single parent and a female household head, present greater challenges for single mothers. There is therefore the need to empirically investigate the effect of single parenthood on the psychological health of mothers in Ghana.

Again, not much empirical work has been done on the psychological effects of employment status on women in Ghana. Meanwhile, Flint, Bartley, Shelton, and Sacker (2013) cited a study conducted by London

School of Hygiene and Tropical Medicine which indicated that unemployment has a significant negative effect on psychological wellbeing. Other researchers also observed that employment has positive effect on mental health. McKeever and Wolfinger (2011) and Wilk (2001) also noted that psychological distress is more common among mothers who work in unstable occupations and are frequently searching for employment. However, previous studies demonstrated inconsistent results on how employment status affects psychological health of individuals (Muller, Hicks, & Wimocur, 1993). Being in a secured employment may buffer the psychological effect of single motherhood. This study therefore investigated the moderation role of employment status (whether the individual is in a stable and secure employment or not) on the relationship between motherhood status (single or partnered mother) and psychological status. The age, number of children and educational levels of the mothers were also involved in the study as control variables by building them into the study. Kish (1987) suggested building potential confounding variable into the research design as additional measured variables, rather than forcing the value to be a constant.

1.1 Purpose of the Study

This study investigated empirically the level of psychological distress associated with single and partnered motherhood in Ghana. Other demographic characteristics of the mothers were considered in the analyses of the experience of the psychological distress as well as the moderating effect of employment status.

1.2 The specific objectives of the study were to find out:

- the level of psychological distress experienced by single and partnered mothers;
- If the mothers' age and number of children they have to take care of have any effect on their level of psychological distress; and
- Whether employment status of the mothers moderates the effect of marital status on psychological distress.

The findings of the study would be very informative for the development of intervention programmes and policies to be put in place to mitigate the burdens and difficulties that mothers, especially, single mothers go through in Ghana. Again, having empirical data on the demographic variables would also help in guidance and counselling programmes to help mothers live a satisfactory life and also balance their family roles and work roles effectively.

2. Theoretical Framework

This study was based on the *marital resource model* (William & Umberson, 2004) and the *crisis model* (Booth & Amato, 1991) which explains the link between family structure and mental health outcomes. The "marital resource" model emphasizes that "marital status differences in health result from the greater economic resources, social support, and regulation of health behaviours that the married enjoy" (Williams & Umberson, 2004). The marital resource model attributes family structure differences in mental health to the greater levels of social capital and economic resources that the married normally get, compared to those who are unmarried (William & Umberson, 2004).

Booth and Amato (1991) claimed that the crisis model accounts for family structure differences in mental health owing to the strains that divorce and widowhood exert on mental health. Williams and Umberson (2004) argued that the crisis model better explains the divergent mental health trajectories of those who are married, compared to those who are unmarried. They state that "although the never married all presumably lack the resources that marriage provides, it is only the previously married who are psychologically disadvantaged by being unmarried" (p. 56). Those who were previously married typically experience psychological distress upon the termination of their marriages owing to the stressors that are inherent in the terminations process and

pre-termination events, whether they are divorced or widowed. Williams and Umberson (2004) further provide support for the crisis model through their analysis of three waves of the *Americans' Changing Lives* survey. They emphasize that being married over the long-term can explain the better overall mental health outcomes of those who are married compared to those who undergo divorce or widowhood. At the same time, Amato (2000) cautions that there are negative mental health outcomes that result from long term stressful marriages, which must not be ignored.

2.1 Single and Partnered Mothers and Psychological Distress

Studies comparing single mothers and partnered mothers indicate that single mothers are more likely than their partnered mothers to experience higher levels of psychological distress and poor mental health (DeKlyen, Brooks-Gunn, McLanahan, & Knab, 2006; Dziak, Janzen, & Muhajarine, 2010; Oyeleke, 2016; Rousou, Kouta, & Middleton, 2016; Wade, Keski-Rahkonen, & Hudson, 2011; Wang, 2004). Similarly, Dziak et al. (2010) in a cross-sectional study examined the psychological distress, psychosocial work quality and work-family conflict of both employed single mothers and employed partnered mothers. The findings revealed that single mothers experienced higher levels of psychological distress and these could be explained by the economic hardship single mothers find themselves. Additionally, single mothers have significantly higher prevalence of depressive episodes, anxiety, stress, unhappiness and physical health problems than married mothers (Cooper, Heron, & Heward, 2007). According to a 2000 National Psychiatric Morbidity Survey conducted in Britain, lone mothers scored 2.2 on the Revised Clinical Interview Schedule (CIS-R) regarding their prevalence of depressive episodes; whereas, partnered mothers scored 1.0 (Cooper et al., 2007). This shows that single mothers are highly susceptible to multiple chronic risk factors such as poor health care access, financial and food insecurity as well as major depressive disorder and physical health conditions like obesity, hypertension, diabetes, and joint pain (Broussard, 2010; Carpenter, 2011).

Critical examination of extant literature which is mainly from the developed parts of the work suggests that marital status plays significant role in the mental health status of mothers. Meanwhile, there is paucity of same in the Ghanaian context and this line of study has been neglected in Ghana, and one can hardly come across any published study in this very important area. Cross-cultural studies indicate that cultural values can contribute to explanations of variations in the perceptions and behaviors of individuals both within and between cultures (Moorman & Blakely, 1995). The Ghanaian culture and customs in relation to marital institution and child rearing are markedly different from that of other countries where most of the studies in the literature were conducted. It is in this vane that this study was conducted to find out how the situation is in Ghana. A number of studies in the literature merely investigated the variations in mental health status of single and partnered mothers without building into the studies other intervening variables that are likely to influence the findings. This study, however, incorporated the number of children that mothers have to take care and the moderation role of employment status which were not the case of most study. Again, most of the studies did not take into consideration the different categories of single mother (never married, separated, divorced and widowed) but considered all of them as if they experience the same condition. The current study examined the experiences of the different single mothers and compared their unique experiences.

Barrett and Turner (2005) demonstrated how divorce and widowhood increase the likelihood of psychological distress with a greater number of marital dissolutions throughout one's life being positively correlated with a greater likelihood of mental health consequences. Lack of social support has also been found to be a contributing factor to the psychological distress experienced by the single mothers (Crosier, Butterworth, & Rodgers, 2007). The relevance of social support in the mental health of mothers, though not explored in this paper, was seen to be a critical variable in the wellbeing and mental health status of mother and is being explored in another project together with other variable. Butterworth (2004) estimated that 45% of single mothers compared to 23.6% of married mothers experience mental disorders.

According to Baranowska-Rataj, Matysiak, and Mynarska (2013), parenthood increases happiness but

psychological distress and anxiety could occur as a result of being a parent. Single mothers do not usually receive economic or financial support from the man or his family. However, married parents usually share these emotional and economic difficulties with their spouse which often reduces their stress. Christopher, England, Smeeding, and Ross (2002), and Mejer and Siermann (2000) agreed that such conditions of single mothers make them victims of economic hardship and the difficulty of taking up multiple roles as a breadwinner. Cairney, Boyle, Offord, and Racine (2003) also noted that, such conditions of single mothers prevent them from taking part in some social activities. This has consistently been reported by researchers that lone or single mothers experience more depression and psychological distress compared to married mothers (Cunningham & Knoester, 2007; Evenson & Simon, 2005; Cairney et al., 2003; Nomaguchi & Milkie, 2003).

Accordingly, studies comparing single mothers and married mothers showed that high level of psychosocial resources available to married mothers improve their mental health for the duration of their childbearing careers and beyond and also reduces the likelihood of depression (Wade, Keski-Rahkonen, & Hudson 2011). For married mothers, levels of self-esteem and perceived mastery are maximized and the amount of stress they experience is minimized. Over the long term, this result in a discrepancy in mental health outcomes that benefits married mothers (Maughan, 2002).

2.2 Employment Status and psychological Distress

Single mothers assume both provider and caregiver roles simultaneously, without having a partner to share the responsibilities (Amato, 2010). The earnings of the employed single mothers are significantly insufficient to cater for their clothing, food, shelter and utility expenses. Kahn and Pearlin (2006) studied the circumstance underlying health inequalities observed in later life and found that financial strain accounted for the various negative mental distress and physical health outcome among single mothers.

Single mothers are more likely to be found in low skilled and low status paying jobs (Galarneu, 2005; Marshall, 2003; Kahn & Pearlin, 2006; Luong, 2008) and this increase their exposure to psychological distress (Galarneu, 2005). Stansfeld and Candy (2006) also found a relationship between physical and mental health problems, and high psychological demands and job stress. Single mothers are susceptible to the cycle of poverty because of the financial and economic hardship of caring for their family and children (Carbonari, 2013).

Single mothers bear the majority of childcare while contributing financially to their families through full-time employment (Urban & Olson, 2005). When mothers are unemployed, the financial consequences of the periods of unemployment further contribute to the care-giving challenges that single mothers experience (Amato, 2000). Even when employed, the nature of the employment plays enormous role. Haleman (2004) intimated that the most effective prospects for single mothers who are employed in low status occupations is to acquire higher levels of education in order to obtain better paying and higher status jobs (Haleman, 2004) or to get married (Lichter, Batson, & Brown, 2004).

Shanafelt (2009) claim that married parents who are employed in professional occupations (such as those relating to law and medicine) experience a high amount of stress arising from the occupational characteristics of the workplace and the work-family demands; however, the financial benefits arising from such professional vocations reduce the likelihood of experiencing mental health problems. In addition, when compared to unmarried parents who are employed in professional occupations, married professional parents experience substantially fewer work-family demands (Bellavia & Frone, 2005).

2.3 Research Question

Based on the objectives of the study and the literature reviewed, the following research question and hypotheses were formulated to guide the study.

- What are the levels of psychological distress experienced by single and partnered mothers?

2.4 Hypotheses

- **H₁**: The level of psychological distress of partnered mothers will be significantly better than that of the different categories of single mothers.
- **H₂**: Employment status of mothers will moderate the effect of marital status on the level of psychological distress of mothers.
- **H₃**: The (a) number of children the mothers has to take care of, and (b) age of the mother will be significant predictors of their psychological distress.

3. Methodology

3.1 Research design

The design used for the study was the descriptive survey design because of the nature and purpose of the study. The survey design was appropriate for this study as it sought to collect data from a sample of individuals about their feeling and views, using questionnaires and structured interview guide.

3.2 Sample and sampling procedure

The total number of respondents was 719 mothers, sampled using purposive sampling, convenience sampling and the snowball sampling procedure from the Cape Coast, Tema, and the Accra Metropolises. Since the relationship of the variables under-study is not locality dependent, the data were aggregated and no analysis was conducted linking individual responses to a specific Metropolis. The purposive sampling was used because the research sought to obtain information from *only mothers*, not all women or every individual in the areas the study. The convenience sampling was employed because women who are mothers are not randomly distributed in the population. In this case, random sampling would not be practicable. Again, it was a little difficult getting the single mothers to respond to the questionnaire. The snowball procedure was therefore adopted to give a representative sample size for the study and this approach proved to be very useful for the study. Successive respondents referred us to other mothers in the study areas. Religious gathering and other women meetings were also utilize which helped to get a relatively large sample size for the study. Table 1 presents the characteristics of the respondents. This consisted of 364 (50.6%) single mothers and 355 (49.4%) partnered mothers. The single mothers comprise of those who never married but had children (58), separated (92), divorced (101) and widowed (113) mothers. Table 1 present the distribution, together with the average age of the mothers. The sample was selected from these major Metropolises in Ghana to ensure greater external validity of the findings.

Table 1

Descriptive statistics of respondents

	Value Label	N=(719)	Percentage
Marital Status	Never Married	58	8.1
	Separated	92	12.8
	Divorced	101	14.0
	Married	355	49.4
	Widow	113	15.7
Highest level of Education	No formal Education	64	8.9
	Primary/JHS/MLC	148	20.6
	Secondary level	109	15.2
	Diploma/HND/Cert A	100	13.9
	First Degree	231	32.1
	Master's Degree	67	9.3
Employment Status	Formal employment	410	57.0
	Informal employment	266	37.0
	Unemployed	43	6.0

The ages of the respondents ranged from 20-64 years, with the average age of all the respondents being 41.42

years with standard deviation of 9.82. The respondents included mothers with no formal education, master's degree holders, with varied employment status.

3.3 Instruments

The main instrument for the study was a questionnaire and structured interview guide consisting of Kessler-10 psychological distress scale. Demographic variables such as age, number of children, marital status and employment status were also measured. The levels of measurement for age, number of children and psychological distress were at least interval, while employment status and marital status were categorical (nominal). These are described below:

Age - The respondents were made to indicate their actual ages. This means that the age was measured as a continuous variable.

Number of Children - Respondents also indicated the exact number of children they had, which was also measured as a continuous variable.

Employment Status - The employment status of the respondents was measured by finding out whether they were employed in the formal sector, self-employed (in the informal sector), or unemployed. If employed, respondent were required to indicate their designation the work they do. These were categorically coded as: (1) formal employment, (2) informal employment, and (3) Unemployed.

Marital Status - The marital status of the respondents was also measured as a categorical variable. They indicated whether they were (1) married, (2) never married, (3) separated, (4) divorced, (5) widowed. Thus, four categories of single mothers were captured in the study: mothers who never married but had children, those who had children but separated, those who actually were divorced, and those who were widows.

Psychological Distress scale - The Kessler-10 psychological distress scale (K10) developed with support from the U.S. government's National Center for Health Statistics for use in the redesigned U.S. National Health Interview Survey (NHIS). The scale was designed to be sensitive around the threshold for the clinically significant range of the distribution of nonspecific distress in an effort to maximize the ability to discriminate cases of serious mental illness (SMI) from non-cases (Kessler, Andrews, Colpe, et al., 2002). Two versions of the scales were used in this study, one for interviewer-administration and the other for self-administration. The scale consists of 10 items, and the scoring system is based on responses on a 5-point Likert type of scale, from 1 (None of the time), 2 (A little of the time), 3 (Some of the time), 4 (Most of the time), and 5 (All of the time). Sample items of the scale are: "In the past 4 weeks, about how often did you feel tired out for no good reason?" and "In the past 4 weeks, about how often did you feel hopeless?" The scale has very good reported reliabilities of alpha ranging from 0.72 to 0.93 (Kessler et al., 2002) and found to be reliable in detecting mental health conditions in a population. The alpha coefficient obtain for this study was 0.83.

The ratings of the 10 responses are added up and the total score is the score on the Kessler Psychological Distress Scale (K10). This results in a score range of 10-50, and respondents who scored:

- under 20 are likely to be well, have no distress
- 20-24 are likely to have a mild psychological distress
- 25-29 are likely to have moderate psychological distress
- 30 and over are likely to have a severe psychological distress

3.4 Data collection procedure

The data was collected using a set of standardized questionnaires and structured interview guide from respondents at various places including schools, hospitals, various work organisations, churches and from homes in the various Metropolises. Data from respondents who could not read and write was obtained using the interview guide, and those who could read and write completed the questionnaire themselves, after explaining

the aims and instructions for the study to them. The respondents were assured of confidentiality and anonymity. A total of 800 copies of a questionnaire and structured interview guides were administered, but 719 were received fully completed and deemed fit to be used for the analyses; thus 89.87% success rate. The success rate was impressive because the items were not many and most were collected immediately. In all, the data were collected within two months.

4. Results and Discussion

The questionnaires were examined for completeness and those that had blank sections were eliminated. The raw data were then entered into the SPSS. These scores were subsequently used for further analyses. The SPSS descriptive statistics procedure was used to capture the means and standard deviations. A scale reliability analysis was also performed to evaluate the reliability of the scale. The results were presented in tables and discussed in detail.

4.1 Psychological Distress of all Mothers

Looking at the percentage of the mothers that fall into each of the various categorizations of distress scores, the result presented in Table 2 indicates that 40.3% of the respondents had no distress, 17.9% of them were mildly distressed, 15.9% moderate psychological distress and 25.9% were severely psychological distressed (as per the K10, Kessler et al., 2002). Further analyses were conducted to find out which group of respondents experienced high levels of distress.

Table 2

Extent of distress among all mothers in the sample

Distress benchmarks	Description	Percentage of mothers
< 20	No distress	40.3%
20-24	Mild psychological distress	17.9%
25-29	Moderate psychological distress	15.9%
30 +	Severe psychological distress	25.9%

4.2 Research question: *What are the levels of psychological distress experienced by single and partnered mother?*

The average psychological distress of all mothers involved in the study was 23.55, which according to the scoring benchmark, is considered to be a mild level of psychological distress. The scores however, differed significantly among the various categories of mothers used in the study.

The results presented in table 4 indicate that divorced mothers had the highest level of Psychological distress (31.42) which is considered to be severe level of distress (Kessler et al., 2002). Widowed and separated mothers were moderately distressed given their distress levels (29.19, SD = 8.9), and 25.05 with SD of 7.67 respectively. The never married single mothers were mildly distressed (20.98, SD = 8.28), and partnered mothers had the least level of psychological distress (19.51, SD = 7.06), considered as not clinically distressed.

Table 3

Respondents' Levels of Psychological Distress (N=719)

	Marital Status	Mean	SD	n	Remarks
Psychological Distress	Married	19.57	7.16	355	No distress
	Never Married	20.98	8.28	58	Mild distress
	Separated	25.05	7.67	92	Moderate
	Widow	29.17	9.14	113	Moderate
	Divorced	31.38	9.95	101	Severe
	Total	23.55	9.34	719	Mild

4.3 Effect of mothers' marital status on their mental health (psychological distress)

The motherhood status of the respondents was explored as a predictor of their distress levels.

H₁: *The level of psychological distress of partnered mothers will be significantly better than that of the different categories of single mothers.*

The one-way between subjects ANOVA was used to find out whether marital status had effect on the distress levels of the mothers. The results indicated in table 4 shows that marital status had significant effects on psychological distress ($F_{(4, 714)} = 61.043, p < .001, \text{Partial eta squared} = .255$) of the mothers.

Table 4

ANOVA table of marital status of mothers

Source	SS	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	15961.551 ^a	4	3990.388	61.043	.000	.255
Intercept	320353.743	1	320353.743	4900.628	.000	.873
Marital status	15961.551	4	3990.388	61.043	.000	.255
Error	46674.138	714	65.370			
Total	461515.000	719				
Corrected Total	62635.688	718				

The Scheffe post hoc analysis to ascertain where the differences lie. The results revealed that the partnered mothers' levels of distress differed significantly from all the other categories of single mothers, except that of the single mothers who never married. All the differences were significant at .001 level of significance. The greatest difference for distress was between partnered mothers and divorced mothers (Mean difference of 11.80), followed by widowed single mothers (9.60). Thus, the mental health of single mothers was significantly lower compared to that of partnered mothers, with divorced mothers having the worst psychological health, and the never married single mothers were found to have the lowest level of distress among the categories of single mothers. The findings of this study concurs with the work of Oyeleke (2016) who concluded from their study of mothers in Abeokuta in Nigeria that single mothers experience higher level of psychological distress than partnered mothers. This is also in line with University of Otago research bulletin report on single mothers and mental health. The report indicated that single parents tend to have poorer mental health than partnered parents, with single mothers particularly at risk.

Table 5

Psychological Distress Multiple comparison of marital status means

(I) Marital Status	(J) Marital Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Married	Never Married	-1.4109	1.14508	.823	-4.9473	2.1254
	Separated	-5.4825*	.94588	.000	-8.4037	-2.5614
	Divorced	-11.8044*	.91179	.000	-14.6203	-8.9885
	Widow	-9.5963*	.87329	.000	-12.2933	-6.8993

As aptly observed by Urban and Olson (2005), single mothers, especially divorced mothers, lack the economic or financial support that the partnered mothers get from their partners or family. Married mothers usually obtain emotional and economic supports from their spouse which often reduces their stress. Both the *marital resource model* (William & Umberson 2004) and the *crisis model* (Booth & Amato, 1991) provide explanations for these differences in the mental health status among the different categories of mothers. The single mothers mostly lack the social support that the married get from their partners and family members. This puts pressure on them in the upbringing and taking care of the daily financial demands. The crisis model also explains why the divorced and widowed single mothers experienced higher levels of distress. In addition to

losing the support from partners, the process of divorce as well as antecedents of the divorce is stressful and affects their mental health.

4.4 Moderating role of employment status on the effect marital status on psychological distress

H2: *Employment status of mothers will moderate the effect of marital status on the level of psychological distress of mothers.*

This hypothesis postulated that the effect of marital status on mental health (psychological distress) could be buffered or reduced by employment status of the mothers. Thus, when a mother is gainfully employed and gets regular and stable income, as in the formal employment, that is likely to buffer the negative effect of the single motherhood on the distress levels of the mothers. The two-way between subjects ANOVA was used to test whether marital status and employment status would interact to influence the psychological distress levels of the mothers.

As indicated by Baron and Kenny (1986), and Lindley and Walker (1993) and cited in Kim, Kaye, and Wright (2001, p. 65) "Moderator variables can be at the interval, continuous, or ratio level, and they can also be categorical." They suggested that when both the predictor and moderator variable are categorical the two-way ANOVA could be used for testing the moderating effects. Marital status (the predictor) and employment status (moderator) in this study are both categorical variables. The two-way ANOVA was therefore used to test the moderation effect of marital status.

The results indicated main significant effects of employment status on psychological distress ($F_{(2, 706)} = 23.428$, $p < .001$; Partial eta square $\eta^2 = .062$). The effect of marital status on psychological distress ($F_{(4, 706)} = 29.173$, $p < .001$; Partial eta square $\eta^2 = .142$) was still significant after the employment status has been added in the model. The effect however has been reduced drastically.

The next stage was to examine the effect for the interaction between marital status and employment. Baron and Kenny as well as Holmbeck (1997) indicate that if the interaction term is statistically significant, the moderator hypothesis is supported. The interaction effects of employment status and marital status on psychological distress was statistically significant ($F_{(6, 706)} = 7.134$, $p < .001$; Partial eta square $\eta^2 = .057$), and the effect sizes of both employment status alone and marital status alone were significantly lower than the interaction effect of the two. These results therefore indicated that employment status moderated (reduced) the effects of marital status on distress level of mothers.

Table 6

Two-way between subject ANOVA table of employment and marital status

Source	SS	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	20347.625 ^a	12	1695.635	28.309	.000	.325
Intercept	132798.112	1	132798.112	2217.067	.000	.758
Emp Status (E)	2806.618	2	1403.309	23.428	.000	.062
Marital Status (M)	6989.620	4	1747.405	29.173	.000	.142
E * M	2563.750	6	427.292	7.134	.000	.057
Error	42288.063	706	59.898			
Total	461515.000	719				

Summary of the Estimates

Table 7

Before moderator variable enters the model

Source	Dependent Variable	F	Sig.	Partial Eta Squared
Marital Status	Psychological Distress	61.043	.000	.255

Table 8

After moderator variable enters the model

Source	Dependent Variable	F	Sig.	Partial Eta Squared	Partial Eta Squared Change
Marital Status	Psychological Distress	29.173	.000	.142	.113
Employment Status	Psychological Distress	23.428	.000	.062	-
Interaction Effect	Psychological Distress	07.134	.000	.057	.198

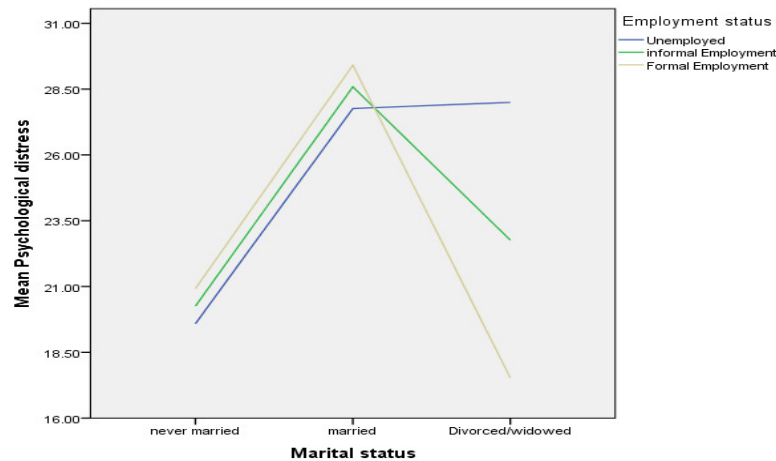


Figure 1. Moderation Graph

The employment status (moderator) had substantially reduced the impact of marital status on psychological distress from 22.5% to 14.2%, a difference of 11.3%. The interaction of employment status and marital status reduced the effect marital status from 22.5% to 5.7%. The results in this study indicated that mothers in formal employment who received regular income had significantly lower psychological distress than those in the informal sector without regular income as well as the unemployed. Employment status significantly buffered the effect of marital distress on the respondents. This shows that employment, for that matter, regular income, is very important in the well-being of mothers. These findings support Singh's (2014) results in a study that examine stress among working and non-working women and found significant difference regarding stress between working and non-working women. The non-working women had higher level of stress as compared to working women.

4.5 Effects of the number of children and age of mothers on their psychological distress

H₃: *The (a) number of children the mothers has to take care of, and (b) age of the mother will be significant predictors of their psychological distress.*

The multiple linear regression analysis was used to test this hypothesis. Before running the regression analysis, the Pearson's product moment correlation was performed to ensure that the predictors and the criterion were linearly related, and to check multicollinearity of the predictors. The correlation analysis indicated that the age ($r = .268, p < .001$) and number of children ($r = .361, p < .001$) were both linearly related with psychological distress; and that there was no issues of multicollinearity ($r = .476, p < .001$).

The multiple regression analysis showed that the two predictors jointly moderately predicted psychological distress ($R = .402$) accounted for 15.9% of the variance in psychological distress and the overall model was significant ($F_{(2, 716)} = 68.849, p < .001$). Each of these variables significantly predicted the distress level of the mothers. The number of children that the mothers have was a stronger significant predictor ($\beta = .340, p < .001$) than the age of the mothers ($\beta = .107, p = .006$). Thus, the more children the mothers had to take care of the higher their level of psychological distress. Older mothers were also found to have had higher level of psychological distress than younger ones.

Table 9*Regression coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	13.464	1.387		9.709	.000
1 Age	.101	.037	.107	2.741	.006
How many children do you have?	2.149	.246	.340	8.729	.000

Note. a. Dependent Variable: Psychological Distress

5. Summary and Conclusion

This study has highlighted the importance of social, emotional and financial support in the psychological well-being of mothers in Ghana. The findings indicated that single mothers experienced higher levels psychological distress than partnered mothers. It was also evident that working in low status employment or not being engaged in any gainful employment also contributes to psychological distress among the mothers. The study further concluded that the number of children that the mothers had to take care of also play significant role in their psychological well-being. Finally, older mothers were found to experience higher levels of psychological distress than younger ones. Lack of financial and emotional supports were also proposed as factors that contribute to the distress. In conclusion, the study indicated that when both mothers and their spouses share the burden that comes with child upbringing and other emotional and life difficulties, this boosts their psychological well-being. Again, Partners share the financial burden of taking care of the family and acting as the bread winner which ultimately enhances their mental health status. The findings in this study confirm the popular saying in Ghanaian parlance: “*Bad marriage is better than divorce.*”

5.1 Recommendations

Based on the findings of the study, it is recommended that the husband's family members equally take responsibility of the children or assist in the care of children in order to reduce the mothers' distress. The government must also strengthen the Social Welfare institutions so that single mothers can be fairly treated to reduce their level of psychological distress. The interstate succession law must be strictly enforced by the state to provide support and security for the widowed and their children. Finally, we recommend that the Livelihood Empowerment Program (LEAP) should be expanded to cover all single mothers who are not gainfully employed. When these measures are put in place, the weight of the burden on the single mothers would be reduced and this would help improve their psychological health.

6. References

- Amato, P. R. (2000). Diversity within single-parent families. In D. H. Demo (Ed.), *Handbook of family diversity* (pp. 149-172). New York: Oxford University Press.
- Amato, P. R. (2010). Research on divorce: Continuing trends and new developments. *Journal of marriage and family*, 72(3), 650-666. <https://doi.org/10.1111/j.1741-3737.2010.00723.x>
- Amato, P. R., & Booth, A. (1991). Consequences of parental divorce and marital unhappiness for adult well-being. *Social Forces*, 69, 895-914. <https://doi.org/10.2307/2579480>
- American Psychological Association. (2016). *Single parenting and today's family*. Retrieved from: <http://www.apa.org/helpcenter/single-parent.aspx>
- Baranowska-Rataj, A., Matysiak, A., & Mynarska, M. (2013). Does lone motherhood decrease women's happiness? Evidence from qualitative and quantitative research. *Journal of Happiness Studies*, 2(2), 34-45.
- Barrett, A., & Turner, R. J. (2005). Family structure and mental health: the mediating effects of socioeconomic status, family process, and social stress. *Journal of Health and Social Behaviour*, 46, 156-169.

- <https://doi.org/10.1177/002214650504600203>
- Bellavia, G. M., & Frone, M. R. (2005). Work-family conflict. In J. Barling, E. K. Kelloway, & M. R. Frone (Eds.), *Handbook of work stress* (pp. 113-147). Thousand Oaks, CA: Sage.
- <https://doi.org/10.4135/9781412975995.n6>
- Booth, A., & Amato, P. (1991). Divorce and psychological stress. *Journal of Health and Social Behavior*, 1(1), 396-407. <https://doi.org/10.2307/2137106>
- Broussard, C. A. (2010). Research regarding low-income single mothers' mental and physical health: A decade in review. *Journal of Poverty*, 14(4), 443-451. <https://doi.org/10.1080/10875549.2010.518003>
- Butterworth, P. (2004). Lone mothers' experience of physical and sexual violence: Association with psychiatric disorders. *British Journal of Psychiatry*, 184, 21-27. <https://doi.org/10.1192/bjp.184.1.21>
- Cairney, J., Boyle, M., Offord, D., & Racine, Y. (2003). Stress, social support and depression in single and married mothers. *Social Psychiatry Psychiatric Epidemiology*, 38, 442-449. <https://doi.org/10.1007/s00127-003-0661-0>
- Carbonari, N. K. (2013). Perceived quality of life of single mothers living in affordable housing in Columbus, Ohio [Thesis], The Ohio State University, Columbus.
- Carpenter, M. (2011). Facts about single parenting and mental health. Retrieved from <http://www.examiner.com/article/facts-about-single-parenting-and-mental-health>
- Christopher, K., England, P., Smeeding, T. M., & Ross, K. (2002). The gender gap in poverty in modern nations: Single motherhood, the market, and the state. *Sociological Perspectives*, 45(3), 219-242. <https://doi.org/10.1525/sop.2002.45.3.219>
- Cooper, J., Heron, T., & Heward, W. (2007). *Applied behavior analysis*. New Jersey: Pearson Education.
- Crosier, T., Butterworth, P., & Rodgers, B. (2007). Mental health problems among single and partnered mothers: The role of financial hardship and social support. *Social Psychiatry and Psychiatric Epidemiology*, 42(1), 6-13. <https://doi.org/10.1007/s00127-006-0125-4>
- Cunningham, A. M., & Knoester, C. (2007). Marital status, gender, and parents' psychological well-being. *Sociological Inquiry*, 77(2), 264-287. <https://doi.org/10.1111/j.1475-682X.2007.00190.x>
- DeKlyen, M., Brooks-Gunn, J., McLanahan, S., & Knab, J. (2006). The mental health of married, cohabiting, and non-co resident parents with infants. *AJPH*, 96(1), 1836-1841. <https://doi.org/10.2105/AJPH.2004.049296>
- DePaulo, B. (2009). Single in a society preoccupied with couples. In *Handbook of solitude: Psychological perspectives on social isolation, social withdrawal, and being alone* (pp. 302-316). UK: John Wiley & Sons.
- Diener, E., Gohn, C., Suh, E., & Oishi, S. (2000). Similarity of the relations between marital status and subjective well-being across cultures. *Journal of Cross-Cultural Psychology*, 31(4), 419-436. <https://doi.org/10.1177/0022022100031004001>
- Dziak, E., Janzen, B. L., & Muhajarineet, N. (2010). Inequalities in the psychological wellbeing of employed, single and partnered mothers: the role of psychosocial work quality and work-family conflict. *International Journal for Equity in Health*, 9(6), 1-8.
- Evenson, R. J., & Simon, R. W. (2005). Clarifying the relationship between parenthood and depression. *Journal of Health and Social Behaviour*, 46, 341-358. <https://doi.org/10.1177/002214650504600403>
- Flint, E., Bartley, M., Shelton, N., & Sacker, A. (2013). Do labour market status transitions predict changes in psychological well-being? *Journal of epidemiology and community health*, 67(9), 796-802. <https://doi.org/10.1136/jech-2013-202425>
- Galarneu, D. (2005). Education and income of lone parents. *Perspectives in Labour and Income*, 6(12), 5-15.
- Ghana Statistical Service. (2012.). 2010 population & housing census summary report of final results. Accra: Sakoa Press Limited
- Haleman, D. (2004). Greater expectations: single mothers in higher education. *International Journal of Qualitative Studies in Education*, 17(6), 769-784. <https://doi.org/10.1080/0951839042000256448>
- Kahn, J., & Pearlin, L. (2006). Financial strain over the life course and health among older adults. *Journal of Health and Social Behaviour*, 47(1), 17-31. <https://doi.org/10.1177/002214650604700102>
-

- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., ... & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological medicine*, 32(6), 959-976.
<https://doi.org/10.1017/S0033291702006074>
- Kim, J. S., Kaye, J., & Wright, L. K. (2001). Moderating and mediating effects in causal models. *Issues in Mental Health Nursing*, 22(1), 63-75. <https://doi.org/10.1080/016128401750158768>
- Kish, L. (1987). *Statistical design for research*. New York: Wiley. <https://doi.org/10.1002/0471725196>
- Lichter, D. T., Batson, C. D., & Brown, J. B. (2004). Welfare reform and marriage promotion: The marital expectations and desires of single and cohabiting mothers. *Social Service Review*, 78(1), 2-25.
<https://doi.org/10.1086/380652>
- Luong, M. (2008). Life after teenage motherhood. *Perspectives in Labour and Income*, 9(5), 5-15.
- Marshall, K. (2003). Benefits of the job. *Perspectives in Labour and Income*, 4(5), 45-12.
- Maughan, B. (2002). *Depression and psychological distress: A life course perspective*. New York: Oxford University Press Inc.
- McKeever, M., & Wolfinger, N. H. (2011). Thanks for nothing: Income and labor force participation for never-married mothers since 1982. *Social Science Research*, 40(1), 63-76.
<https://doi.org/10.1016/j.ssresearch.2010.06.008>
- Mejer, L., & Siermann, C. (2000). *Income poverty in the European Union: Children, gender and poverty gaps*. Eurostat.
- Mistry, R. S. G. D. Sareen, H., De Vogli, R., & Halfon, N., 2007. Parenting related stressors and self-reported mental health of mothers with young children. *American Journal of Public Health*, 97(7), 1261-1268.
<https://doi.org/10.2105/AJPH.2006.088161>
- Muller, J., Hicks, R., & Winocur, S. (1993). The effects of employment and unemployment on psychological well-being in Australian clerical workers: Gender differences. *Australian Journal of Psychology*, 45(2), 103-108. <https://doi.org/10.1080/00049539308259126>
- Nomaguchi, K. M., & Milkie, M. A. (2003). Costs and rewards of children: The effects of becoming a parent on adults' lives. *Journal of Marriage and Family*, 65(2), 356-374.
<https://doi.org/10.1111/j.1741-3737.2003.00356.x>
- Oyeleke, A. I. (2016). Income and marital status as correlate of psychological well-being of formal caregivers in Abeokuta township. *Applied Science Report*, 15(2), 105-110.
- Pavot, W., & Diener, E., (1993). The affective and cognitive context of self-reported measures of subjective well-being. *Social Indicators Research*, 28, 1–20. <https://doi.org/10.1007/BF01086714>
- Rousou, E., Kouta, C., & Middleton, N. (2016). Association of socio-demographics with poor self-rated health and depressive symptomology among single mothers in Cyprus: A descriptive cross-sectional study. *BMC Nursing*, 15(1), 15. <https://doi.org/10.1186/s12912-016-0134-x>
- Shanafelt, T. D. (2009). Enhancing meaning in work: A prescription for preventing physician burnout and promoting patient-centered care. *Jama*, 302(12), 1338-1340. <https://doi.org/10.1001/jama.2009.1385>
- Singh, S. K. (2014). Life satisfaction and stress level among working and non-working women. *The International Journal of Indian Psychology*, 1(4), 121-128.
- Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health - A meta-analytic review. *Scandinavian Journal of Work, Environment and Health*, 32(6), 443–62.
<https://doi.org/10.5271/sjweh.1050>
- University of Otago Bulletin. (2013). Single mothers most at risk of poor mental health. Retrieved from <http://www.otago.ac.nz/news/news/otago061350.html>
- Urban, J., & Olson, P. (2005). A comprehensive employment model for low income mothers. *Journal of Family and Economic Issues*, 26(1), 101-122. <https://doi.org/10.1007/s10834-004-1414-2>
- Wade, T. D., Keski-Rahkonen, A., & Hudson, J. (2011). Epidemiology of eating disorders. In M. Tsuang & M. Tohen (Eds.), *Textbook in psychiatric epidemiology* (3rd ed., pp. 343-360). New York: Wiley.
<https://doi.org/10.1002/9780470976739.ch20>
- Wang, J. (2004). The difference between single and married mothers in the 12-month prevalence of major
-

depressive syndrome, associated factors and mental health service utilization. *Social Psychiatry Epidemiology*, 39 (1), 26-32. <https://doi.org/10.1007/s00127-004-0699-7>

Wilk, P. (2001). Women's employment transitions and changes in psychological distress. *Canadian Studies in Population*, 28, 513-533.

Williams, K., & Umberson, D. (2004). Marital status, marital transitions, and health: A gendered life course perspective. *Journal of Health and Social Behavior*, 45(1), 81-98.
<https://doi.org/10.1177/002214650404500106>

