

The Moderating Role of Pregnancy Status among Coping Strategies, Depression, Anxiety and Stress across Pakistani Married Women

Sunita Peter,

Foundation University, Rawalpindi Campus

Jaffar Abbas,

Shanghai University, Baoshan Campus

Muhammad Aqeel, Tanvir Akhtar & Khowla Farooq

Foundation University, Rawalpindi Campus

Current study designed to investigate the moderating role of pregnancy status among coping strategies, stress, anxiety and depression across Pakistani women. Sample consisted of 200 married women (Pregnant, n= 100; Non-Pregnant, n=100) with age ranged from 20 to 40 years. Purposive sampling technique was used based on the cross-sectional research design. The married, pregnant and non-pregnant women were inquired at the gynecology and obstetrics department of hospitals in Rawalpindi, Islamabad and Taxila, Pakistan. Two scales were applied to assess depression, anxiety, stress, active avoidance coping, problem focused coping, emotional support, religious coping, in married women. This study revealed that Active Avoidance Coping was significantly predicting to depression ($\beta=.25$, $p<.05$), anxiety ($\beta=.26$, $p<.05$), and stress ($\beta=.26$, $p<.05$) in pregnant women. However, Emotion focused coping was also significantly predicting to stress ($\beta=.23$, $p<.05$) in pregnant women. In addition, results also revealed that problem focused coping was significantly predicting to depression ($\beta=.10$, $p>.05$) and anxiety ($\beta=.29$, $p<.05$) in pregnant women. Our study analysis revealed that pregnancy status was playing role of moderator among coping strategies, stress, anxiety and depression across Pakistani women. This study would be helpful for health and clinical settings to spread awareness for pregnant women, how to handle psychological problems with their health issues.

Keyword. Pregnancy, coping strategies, depression, anxiety and stress

1. *Department of Psychology, Foundation University, Rawalpindi.*
2. *Ph.d scholar, Shanghai University, Baoshan Campus, Shanghai China*
3. *Lecturer, Department of Psychology, Foundation University, Rawalpindi Campus.*
4. *Head of Psychology Department, Foundation University, Rawalpindi Campus.*
5. *Department of Psychology, Foundation University, Rawalpindi.*

Correspondence concerning this article should be addressed to Sunita Peter *Department of Psychology, Foundation University Rawalpindi Campus.* Email: sunita_peters@yahoo.co.uk.

Pregnancy is a time of joyfulness in a woman's life (Hamilton & Lobel, 2008). However, for some women it can be a time of stressfulness (Hamilton & Lobel, 2008; Peñacoba-Puente, Carmona-Monge, Marín-Morales, & Naber, 2013). Along with social stressors, pregnant women experience changes in their physique, their interpersonal relationships change and they experience changes in their self-identity; these changes cause pregnant women distress (Hamilton & Lobel, 2008).

Coping is the effort made by a person at the cognitive and behavioral level, in order to deal with the situations that cause stress and have negative consequences (Lazarus & Folkman, 1984). According to the Lazarus model of coping, there are two factors; Problem Focused and Emotion Focused Coping (Lazarus & Folkman, 1984). Problem focused Coping is situation centered, here the person pays more attention to the solution of the problem, planning around the problem, and gathering information about the problem whereas, Emotion-focused Coping is more centered towards the emotions of a person towards the stressful situation encountered and how a person feels about themselves and others in the light of the stressful situation (Peñacoba-Puente et al., 2013). Another coping strategy is the Religious Coping strategy, it was found to be the strongest predictor of high levels of optimism and religiosity (Hamilton & Lobel, 2008; (Jami & Kamal 2017; Kalsoom, Masood & Jami 2017; Ahmed, Ahmed, Aqeel, Akhtar, & Salim, 2017; Cisheng, Jamala, Aqeel, Shah, Ahmed, & Gul, 2017; Khan, Amanat, Aqeel, Sulehri, Amanat, Sana, & Amin, 2017).. In a study Mikulincer and Florian (1999), found that women who used Avoidant Coping had weak attachments to their fetuses and also had low mental health, specifically in the first trimester of their pregnancies.

Numerous prior studies have looked at ways women cope with stress during pregnancy. The studies already conducted on the pregnant sample with regards to their coping strategies of choice, include pregnancies with a risk factor that is detrimental to the

health and wellbeing of the mother and the child (Demyttenaere, Maes, Nijs, Odendael, & Van Assche, 1995; Geerinck-Vercammen & Kanhai, 2003; Lowenkron, 1999). Other literature that is available, includes teenage pregnancies or pregnancies induced through the in-vitro system of fertilization (Baor & Soskolne, 2010; Kirchner, Muñoz, Forns, Peñarrubia, & Balasch, 2011; Lukse & Vacc, 1999).

Given the findings of past researches, it is clear that the Active Avoidant Coping is a dangerous mechanism employed by pregnant women while the Emotion Focused Coping yield positive results on account of reducing stress (Rudnicki, Graham, Habboushe, & Ross, 2001).

Pregnancy brings about a joyful time in a woman's life, but it can be stressful for some as well (Hamilton & Lobel, 2008). A very high number of women experience symptoms of Depression during their pregnancy (de Tychey et al., 2005) and Stress (Peñacoba-Puente et al., 2013).

Pregnant women also experience Anxiety this brings about Dysfunction in their life activities (Benner, 2000). It is found that Major Depressive Disorder, is a chronic and recurrent illness (Judd et al., 1998), in women aged 15 to 44 years of age, in developed and developing regions, globally (Murray & Lopez, 1997), previous studies reveal that around 30% women, worldwide, harbor some level of Depression. (Da Costa et al., 2000; Dayan et al., 2002; Einarson et al., 2001; Evans, Heron, Francomb, Oke, & Golding, 2001; Gotlib, Whiffen, Mount, Milne, & Cordy, 1989; Johanson, Chapman, Murray, Johnson, & Cox, 2000; Kelly, Russo, & Katon, 2001; O'Hara, 1986), it is very unfortunate that although a very significant number of pregnant women experience symptoms of Depression, yet they go unobserved and treated indifferently (Chokka, 2002). All in all, pregnancy is undoubtedly, a stressful time period in a woman's life (Peñacoba-Puente et al., 2013).

Birth complications like low birth weight of the child, poor neonatal status, premature birth and intrauterine growth retardation are all consequences of the emotional distress and symptoms of Depression and Anxiety experienced by the expecting mother (Abdel-Gawad, Badr, & Shaban, 2005; Berle et al., 2005; Costa, Brender, & Larouche, 1998; Da Costa et al., 2000; Dole et al., 2003; Hansen et al., 2000; Hedegaard, Henriksen, Sabroe, & Secher, 1993; Pagel, Smilkstein, Regen, & Montano, 1990; Rondo et al., 2003), although negative or unclear findings have also been reported (Berle et al., 2005; Brooke, Anderson, Bland, Peacock, & Stewart, 1989; Hedegaard, Henriksen, Secher, Hatch, & Sabroe, 1996).

Furthermore, it was found that Depression in women was particularly predominant in at the time of pregnancy and then child rearing, one such proof is of the women in the United States of America; 10% of these women meet the diagnostic criteria for major depressive disorder (Gotlib et al., 1989). There are various reasons why women who are expecting a child may fall into Depression, problems in the marital life, an unplanned or unwanted conception and past history of depression in the family, all become factors that make pregnant women vulnerable to Depression (Kitamura, Shima, Sugawara, & Toda, 1993). Treatment for Depression includes the use of selective serotonin re-uptake inhibitor and the traditional tricyclic antidepressant drugs, it is seen that they are highly effective in treatment (Kumar, Marks, Platz, & Yoshida, 1995; Montgomery, 1995).

It is observed that women, who belong to minority groups, use the Avoidance Coping most frequently, in response to Depression (Rudnicki, Graham, Habboushe, & Ross, 2001). According to Orejudo and Frojan, (2005), women who are not pregnant tend to use the Problem Focused Coping Strategies more, they seek social support, gather information and positive

reappraisal, and this supports their wellbeing. The coping strategies that are maladaptive and cause an increase in the levels of Depression and Anxiety are avoidance and escape, confrontation, self-blaming, ruminative thoughts, maximization and exaggerated emotional response (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Garnefski, Legerstee, Kraaij, van den Kommer, & Teerds, 2002; Pakenham, Smith, & Rattan, 2007; Penley, Tomaka, & Wiebe, 2002; Skinner, Edge, Altman, & Sherwood, 2003).

Anxiety is another constituent of the psychological distress felt by pregnant mothers, it is linked with the behavioral and emotional problems that the child may develop in the course of their lives (O'Connor, Heron, Glover, & team, 2002).

Stress is a psychological stressor and coping with Stress and stressful situations is not a singular concept. One of the more popular concepts of Stress is that it is a process (Lazarus, 1966; Lazarus & Folkman, 1984). The concept of Stress as a process leads to the assumption that some coping strategies are adaptive and some are maladaptive in the dealing with stress, while, this is so, it also implies that coping is situational. Individuals tend to be subjective in their use of Coping Strategies in relevance to the stressful situation (Lazarus & Folkman, 1984). The assessment and the research done on Stress and Coping Strategies is strongly related to the Lazarus mode, however, Lazarus (1999), brought to attention that there are methodological difficulties in approaching Stress as a process for all researchers. In the light of this finding, most researchers focus on the individual coping strategies used by people when they come across stressful situations rather than, focusing on the stressor itself.

As far as Pregnancy is concerned, most of the research is done where pregnant women are exposed to the stressors and their use of coping strategies is analyzed. Past studies show the analysis

of coping strategies in women with high-risk pregnancies (Demyttenaere et al., 1995; Geerinck-Vercammen & Kanhai, 2003; Lowenkron, 1999), teenage pregnancies (Kaye, 2008; Myors, Johnson, & Langdon, 2001), and in women undergoing in vitro fertilization (Baor & Soskolne, 2010; Kirchner et al., 2011; Lukse & Vacc, 1999). In contrast to the situation of an added stressor, very little is known about the coping strategies used by women who have normal or minimal stress pregnancies. However, these previous situations maybe considered for low risk pregnancies as well because without a doubt, normal or not, pregnancy is a tie of stressfulness in a woman's life.

current study proved to be significant in the fields of psychology with relation to pregnant women as there is previously very less research conducted to study the effects of coping strategies on pregnant women (Peñacoba-Puente et al., 2013). Secondly it is important to know whether women with neurotic tendencies develop the corresponding disorders while pregnant due to hormonal changes and lack of positive coping strategies. Furthermore, it is important to study pregnant women and to determine if their levels of Coping Strategies affect overall mental health specifically Psychological Distress.

The study is also significant to determine the mental wellbeing of pregnant women in Pakistan given their treatment by families and the attitude of health care professionals, which is not very accommodating for them. This research hopes to change the attitude of Pakistani's towards pregnant women.

Method

Objectives

1. To study the relationship among coping strategies, stress, anxiety and depression in pregnant and non pregnant women.
2. To study the moderating role of pregnancy status among coping strategies, stress, anxiety and depression in women.
3. Women who are in their 1st and 2nd trimester are more predisposed towards Psychological Distress compared to those women who are in their 3rd trimester.

Hypotheses

1. Active avoidance coping has a positive relationship with stress, anxiety and depression in pregnant and non pregnant women.
2. Emotional focused coping has a positive relationship with stress, anxiety and depression in pregnant and non pregnant women.
3. Problem focused coping has a negative relationship with stress, anxiety and depression in pregnant and non pregnant women.
4. Religious Coping has a negative relationship with stress, anxiety and depression in pregnant and non pregnant women.
5. Women who are in their 1st and 2nd trimester are more predisposed towards Psychological Distress as compared to those women who are in their 3rd trimester.

Sample

Purposive sampling technique was used based on cross-sectional design. Data was collected from Rawalpindi, Taxila and Islamabad hospitals, where 100 pregnant women and 100 non-pregnant married women of the ages 20-40 years were selected.

Age ranged from 20 to 40 years is best suitable as at this age women are most likely to be married and pregnant. However over the age of 40 the chance of medical risks increases (Aasheim, Waldenström, Rasmussen, Espehaug, & Schytt, 2014) hence the age limit for the sample is up to 40 years.

Instrument

Brief Cope Scale. It was devised by Carver, 1997. It is a 28-item self-report measure of both adaptive and maladaptive coping skills. The scale yields four subscales; Active Avoidance Coping (items number: 1, 4, 6, 9, 11, 13, 16, 19, 21, 26), Emotional Focused Coping (items number: 12, 15, 17, 18, 20, 24, 28), Problem Focused Coping (items number: 2, 5, 7, 10, 14, 23, 25) and Religious Coping (items number: 3, 8, 22, 27). The scale's developer does not advise a particular method for second-order factoring and suggests that researchers develop their own models for second-order factors based on data from individual research samples.

Depression, Anxiety and Stress Scale (Lovibond & Lovibond, 1995). It developed by Lovibond & Lovibond 1995 and translated by Zafar & Khalily, (2014). Which includes three self-report scales designed to measure the negative emotional states of depression, anxiety and stress (Lovibond & Lovibond, 1995). Each of the three scales contains 14 items, divided into subscales of 2-5 items with similar content. The Depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, and lack of interest/involvement, anhedonia, and inertia (items are: 3, 5, 10, 13, 16, 17, 21, 24, 26, 31, 34, 37, 38, and 42). The Anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect (items are: 2, 4, 7, 9, 15, 19, 20, 23, 25, 28, 30, 36, 40, and 41). The Stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being

easily upset/agitated, irritable/over-reactive and impatient (items are: 1, 6, 8, 11, 12, 14, 18, 22, 27, 29, 32, 33, 35, and 39). Respondents are asked to use 4-point severity/frequency scales to rate the extent to which they have experienced each state over the past week.

Procedure

The participants were inquired at the gynecology and obstetrics department of hospitals in Rawalpindi, Islamabad and Taxila, Pakistan. All the subjects approached and briefed about the purpose of the current study. The informed consent was taken before the subjects filled the questionnaires and all their queries, relevant to the scales and intent of research were answered to the satisfaction of the pregnant women. The study has been endorsed by the ethical committee of the Foundation University, Rawalpindi Campus of Institutional/ethical/ Review Board.

Analysis plan

The data was first entered and computed on Statistical Package for the Social Sciences (SPSS). The reliability of all the applied scales along with their subscales was also measured on SPSS. After which correlations between variables were run. To check the involvement of demographic variables, Analysis of Variance (ANOVA), was run on SPSS.

To check for the moderating role of Pregnancy among Coping Strategies and development of Psychological Distress, the Analysis of Moment Structure (AMOS) software was used. Two groups were made based on the sample; pregnant and non-pregnant women and the regression analysis were run according to the hypothesis that needed to be tested. The results are computed in their respective tables in the following chapter.

Results

Table 1

Correlation matrix between Coping Strategies and Psychological Distress in pregnant women (N=100).

	M	SD	α	1	2	3	4	5	6	7	8	9
1 BCS	51.1	10.6	.74	-	.868**	.789**	.787**	.619**	.540**	.475**	.602**	.433**
2.AAC	13.9	4.6	.45		-	.527**	.538**	.484**	.483**	.430**	.522**	.396**
3 PFC	15.3	3.3	.49			-	.557**	.344**	.434**	.353**	.522**	.341**
4 EFC	13.9	3.4	.48				-	.303**	.439**	.377**	.438**	.404**
5 RFC	7.8	2.1	.41					-	.272**	.288**	.356**	.129
6DASS	41.3	25.0	.93						-	.912**	.919**	.938**
7 DS	10.6	8.9	.85							-	.753**	.775**
8 AS	13.3	8.4	.82								-	.805**
9 SS	17.5	9.9	.82									-

Note: Correlation results are reported in this table. BCT= Brief Cope Scale, AAC= Active Avoidance Coping, PFC= Problem Focused Coping, EFC= Emotion Focused Coping, RFC= Religious Focused Coping, DASS= Depression Anxiety and Stress Scale, DS= Depression Scale, AS= Anxiety Scale, SS= Stress Scale.

Table 2

Correlation matrix between Coping Strategies and Psychological Distress in non-pregnant women (N=100).

	M	SD	α	1	2	3	4	5	6	7	8	9
1 BCS	50.92	9.35	.74	-	.803**	.652**	.708**	.666**	.400**	.389**	.327**	.392**
2 AAC	14.79	4.18	.45		-	.257**	.414**	.481**	.443**	.428**	.374**	.425**
3 PFC	14.76	3.30	.49			-	.345**	.263**	.067	.070	.062	.055
4 EFC	13.34	3.05	.48				-	.274**	.192	.167	.133	.232*
5 RFC	8.02	2.51	.41					-	.429**	.437**	.353**	.396**
6 DASS	48.99	24.71	.93						-	.932**	.913**	.925**
7 DS	13.89	9.25	.85							-	.769**	.807**
8 AS	15.45	8.83	.82								-	.762**
9 SS	19.64	8.67	.82									-

Note: Correlation results are reported in this table. BCS= Brief Cope Scale, AAC= Active Avoidance Coping, PFC= Problem Focused Coping, EFC= Emotion Focused Coping, RFC= Religious Focused Coping, DASS= Depression Anxiety and Stress Scale, DS= Depression Scale, AS= Anxiety Scale, SS= Stress Scale

The results revealed that Active Avoidance Coping was positively significant ($p < .01$) correlated with Psychological Distress among Pakistani pregnant women. Regarding the hypothesis 1 which

states that “Active Avoidance Coping has a positive relationship with Psychological Distress in Pakistani pregnant women” was accepted and proved.

The results revealed that Problem Focused Coping was positively significant ($p < .01$) correlated with Psychological Distress among Pakistani pregnant women. Regarding the hypothesis 3 which states that “Problem Focused Coping has a negative relationship with Psychological Distress in Pakistani pregnant women” was rejected and disapproved.

The results reveal that Emotional Focused Coping was positively significant ($p < .01$) correlated with Psychological Distress among Pakistani pregnant women. Regarding hypothesis 2 which states that “Emotional Focused Coping has a positive relationship with Psychological Distress in Pakistani pregnant women” was accepted approved.

The results revealed that Religious Coping was partially significant correlated ($p < .01$, n.s) with Psychological Distress among Pakistani pregnant women. Regarding the hypothesis 4 which states that “Religious Coping has a negative relationship with Psychological Distress in Pakistani pregnant women” was partially accepted and approved.

Table 3

Trimester wise difference on Depression Anxiety and Stress among pregnant women (N=200).

Variables	1 st trimester (n=14)		2 nd trimester (n=28)		3 rd trimester (n=59)		F	p
	M	SD	M	SD	M	SD		
DS	15.85	13.38	7.21	4.40	11.00	8.65	4.88	.010
AS	15.57	11.17	14.14	7.53	12.28	8.01	1.08	.341
SS	18.57	11.75	17.08	8.83	17.38	10.03	.108	.898

Note: this table shows difference between psychological distress among pregnant women with respect to their duration of pregnancy. DS= Depression Scale, AS= Anxiety Scale, SS= Stress Scale

The table indicates one way analysis of variance for Psychological Distress for pregnant women in their 1st 2nd and 3rd trimester. The results indicate that Depression was highly significant among pregnant women. However, Anxiety and Stress remained non-significant throughout the term of pregnancy. Thus hypothesis 5 which states that “women who are in their 1st and 2nd trimester are more predisposed towards Psychological Distress as compared to those women who are in their 3rd trimester was partially accepted.

The Moderating Role of Pregnancy among Coping Strategies, Depression, Anxiety and Stress across Pakistani Married Women

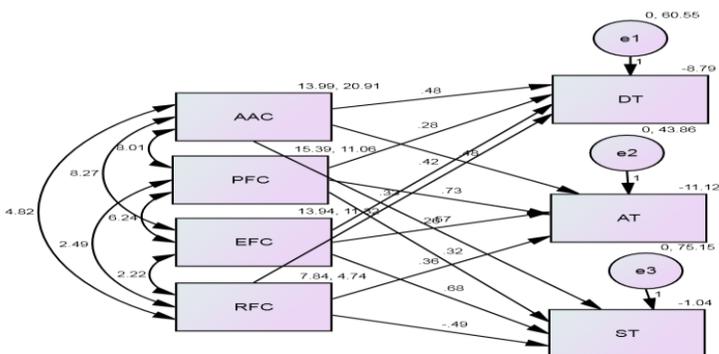


Figure 1. The moderating role of Pregnancy between Coping Strategies and development of Depression, Anxiety and Stress

Table 4

The moderating role of Pregnancy between Coping Strategies and development of Depression, Anxiety and Stress (N=100).

	Depression			Anxiety			Stress		
	B	S.E	β	B	S.E	β	B	S.E	β
AAC	.481	.228	.249**	.484	.194	.266***	.568	.254	.265***
EFC	.419	.297	.159	.256	.253	.103	.679	.331	.233*
PFC	.276	.300	.104	.728	.255	.291***	.320	.334	.108
RFC	.333	.411	.082	.361	.350	.094	-.487	.458	-.108

Note. The table shows the moderation between Coping Strategies and Psychological Distress across pregnant women. AAC= Active Avoidance Coping, PFC= Problem Focused Coping, EFC= Emotion Focused Coping, RFC= Religious Focused Coping.

This AMOS analysis revealed that Active Avoidance Coping was significant predictor for Depression ($\beta=.249$, $p<.05$), Anxiety ($\beta=.266$, $p<.05$), and Stress ($\beta=.265$, $p<.05$) among pregnant women. This study also shows that Emotion Focused Coping was non-significant predictor for Depression ($\beta=.159$, $p>.05$) and Anxiety ($\beta=.103$, $p>.05$) across pregnant women. However, Emotion Focused Coping was significant predictor for Stress ($\beta=.233$, $p<.05$) across pregnant women.

The Moderating Role of Pregnancy among Coping Strategies, Depression, Anxiety and Stress across Pakistani Married Women

In addition the results also showed that Problem Focused Coping was non-significant predictor for Depression ($\beta=.104$, $p>0.5$) and Stress ($\beta=.108$, $p>0.5$) but significant predictor for Anxiety ($\beta=.291$, $p<0.5$) across pregnant women. Lastly, the study revealed that Religious Coping was non-significant predictor for Depression ($\beta=.082$, $p>0.5$), Anxiety ($\beta=.094$, $p>0.5$) and Stress ($\beta=-.108$, $p>0.5$) across pregnant women. Thus the results suggest that Pregnancy is a partial mediator between Active Avoidance Coping, Emotion Focused Coping, Problem Focused Coping, Religious Coping and Depression, Anxiety and Stress.

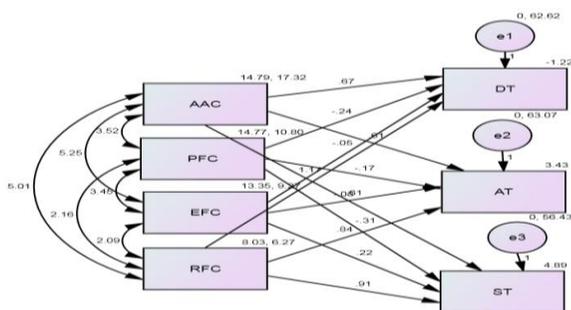


Figure 2. The moderating role of status of non-pregnancy between Coping Strategies and development of Depression, Anxiety and Stress

Table 5

The moderating role of status of non-pregnancy between Coping Strategies and development of Depression, Anxiety and Stress (N=100).

	Depression			Anxiety			Stress		
	B	S.E	β	B	S.E	β	B	S.E	β
AAC	.673	.232	.304***	.607	.233	.288***	.615	.220	.297***
EFC	-.049	.299	-.016	-.084	.300	-.029	.218	.283	-.117
PFC	-.243	.263	-.087	-.175	.264	-.065	-.308	.250	.077
RFC	1.170	.368	.318***	.842	.369	.240**	.909	.349	.264***

Note. The table shows the moderation between Coping Strategies and Psychological Distress across non-pregnant women. AAC= Active Avoidance Coping, PFC= Problem Focused Coping, EFC= Emotion Focused Coping, RFC= Religious Focused Coping.

The results analysis revealed that Active Avoidance Coping was significant predictor for Depression ($\beta=.304$, $p<.05$), Anxiety ($\beta=.288$, $p<.05$), and Stress ($\beta=.297$, $p<.05$) among non-pregnant women. This study also shows that Emotion Focused Coping was non-significant predictor for Depression ($\beta=.016$, $p>.05$), Anxiety ($\beta=-.029$, $p>.05$) and Stress ($\beta=-.117$, $p>.05$) across non-pregnant women. In addition the results also showed that Problem Focused Coping was non-significant predictor for Depression ($\beta=-.087$, $p>.05$), Anxiety ($\beta=-.065$, $p>.05$) and Stress ($\beta=.077$, $p>.05$) across non-pregnant women. Lastly, the study revealed that Religious Coping was significant predictor for Depression ($\beta=.3.18$, $p<.05$), Anxiety ($\beta=.024$, $p<.05$) and Stress ($\beta=.264$, $p<.05$) across non-pregnant women. Thus the results suggest that status of non-pregnancy is a partial moderator between Active Avoidance Coping, Emotion Focused Coping, Problem Focused Coping, Religious Coping and Depression, Anxiety and Stress.

Discussion

Current study planned to examine among coping strategies, stress, anxiety and depression in pregnant and non pregnant women. Moreover, to investigate the moderating role of pregnancy status among coping strategies, stress, anxiety and depression in women.

The present study results revealed that Active Avoidance Coping Strategy was positive associated with depression, anxiety and stress in pregnant women. Regarding to hypothesis no. 1 which stated that Active avoidance coping has a positive relationship with stress, anxiety and depression in pregnant and non pregnant women was supporting in current study. Previous study findings were similar with current study results. Numerous prior studies explained that pregnancy or the conception of a child leads couples towards parenthood, this brings about a change in their lives, and for mothers the change includes physical and psychological change together. Consequently, Pregnancy while being a time of happiness (Hamilton & Lobel, 2008) also is a time of Psychological Distress (De-Tychev et al., 2005; Hamilton & Lobel, 2008; Peñacoba-Puente et al., 2013). Previous study also indicate that the Active Avoidant Coping Strategy is a maladaptive coping skill

(Borcherding, 2009) and it contributes to psychological distress in pregnant women (Hamilton & Lobel, 2008).

The second aim of the current study was to investigate emotional focused coping has a positive relationship with stress, anxiety and depression in pregnant and non pregnant women. Hypothesis number 2 is also reported in table 1 of correlation. The hypothesis have been approved, hence illuminating that the increased use of the emotion focused coping is maladaptive (Borcherding, 2009), and leads towards increased level of Psychological Distress in pregnant women (Mulder et al., 2002). Hence, it is not a beneficial coping strategy and its use should be avoided, especially by pregnant women as it will have detrimental effects on the health of the mother as well her expected child. The results in table 2, for non pregnant women, indicate that, the use of emotion focused coping will not cause women to develop Depression and Anxiety. However, the more the orientation of women is towards emotions, they will be more stressed.

Regarding to hypothesis no. 1 which stated that problem focused coping has a negative relationship with stress, anxiety and depression in pregnant and non pregnant women was supporting in current study. Problem focused coping is a beneficial and adaptive coping strategy (Hamilton & Lobel, 2008), the hypothesis 3 aimed to find the negative relationship between Problem Focused Coping and Psychological distress however the corresponding results to these hypothesis, reported in table 1 of correlation are disproved indicating that the Pakistani sample of pregnant women has an increase in their Psychological Distress with the use of Problem Focused Coping. Similar results are reported in table 2 of correlation for non pregnant women. The more they use Problem Focused Coping the more psychologically distressed they are.

The results resemble the word of Lazarus & Folkman (1984), that explains that Problem Focused Coping is not always beneficial, often times it is an obstacle to the psychological well-being. Any coping strategy requires an appropriate context for its use (Lazarus & Folkman,

1984), if there is a discrepancy among the situation and the strategy used to cope with it, it will not yield beneficial results.

One other aim of this study was to examine the negative relationship between Religious Coping and Psychological distress. Religious Focused Coping is a positive approach towards dealing with Psychological Distress (Giurgescu, Penckofer, Maurer, & Bryant, 2006; Hamilton & Lobel, 2008). The hypothesis for Religious Focused Coping; 4 has been reported in table 1 of correlation and have been partially disapproved. These results again indicate that Pakistani pregnant women have an impeding progress towards psychological well-being with their use of the Religious Focused Coping. The use of Religious Focused Coping by non pregnant women is also unhelpful in dealing with Psychological Distress, as indicated by the results of correlation in table number 2. It is not always necessary for Religious Coping to be beneficial, sometimes excessive reliance on one's spiritual resources alone can cause increased levels of anxiety and ambiguity (Peñacoba-Puente et al., 2013).

An additional aim of this study was to see the role of the demographic variable; duration of pregnancy, on the levels of Psychological Distress in pregnant women. For this a trimester wise categorization was made for expecting mothers. The women in their 1st trimester have their pregnancy between the first and third months, women in the 2nd trimester lie between the fourth and sixth month of pregnancy while the women in their 3rd trimester fall in the seventh to ninth month of pregnancy.

It was aimed to see that women in their 1st and 2nd trimester are more psychologically distressed; have high levels of Depression, Anxiety and Stress, as compared to women in their 3rd semester. Analysis of variance (ANOVA) was run on SPSS to differentiate between the three groups of pregnant women. The result of hypothesis number 5 has been reported in table number 3 of ANOVA, it is clear that Depression is highly significant in pregnant women while Stress and Anxiety remain non-significant. Thus, hypothesis number 5 has been partially accepted. The high levels of Depression are attributable to the changes a pregnant

woman goes through and the apprehension she feels towards her future and the future of her child (Milgrom et al., 2008; Peñacoba-Puente et al., 2013).

Lastly, this study aimed to study the moderating role of Pregnancy between Coping Strategies and Psychological Distress; Depression, Anxiety and Stress. Moderation was run on the Analysis of Moment Structure; (AMOS) software with Pregnancy as the moderator. The results have been reported in table number 4. It was found that pregnant women who had employed the Active Avoidance Coping significantly predicted Psychological Distress. Their levels of Psychological Distress were high.

Secondly, the results showed that pregnant women who used Emotion Focused Coping had high levels of Stress and lower levels of Depression and Anxiety. It was also seen that Problem Focused Coping was a non-significant predictor of Depression and Stress, showing that if pregnant women are to use Problem Focused Coping they will be able to deal with Depression and Stress, however, it was also seen that Problem Focused Coping significantly predicted Anxiety. This could be in relevance to finding the appropriate solution and being apprehensive about its effectiveness.

Finally, it was seen that Religious Focused Coping is a non-significant predictor of Psychological Distress in pregnant women, indicating that pregnant women find relief and peace in their spiritual resources. Hence, the obtained results have revealed that Pregnancy is a partial mediator between the four types of Coping and Psychological Distress. The results add on to the Lazarus and Folkman (1984), model of coping as it clearly states that coping is contextual, while some coping strategies like Problem Focused Coping and Religious Coping might be adaptive in some situations and become obstacles in other situations similar is the case with Emotion Focused Coping, however, Active Avoidance Coping remains maladaptive in all situations and is a negative strategy to use (Borcherding, 2009; Hamilton & Lobel, 2008; Huizink, de Medina, Mulder, Visser, & Buitelaar, 2002; Peñacoba-Puente et al., 2013).

The results reported in table number 5 are for the moderating role of the status of non pregnancy on Psychological Distress. It is seen that the use of Active Avoidance Coping and Religious Focused Coping has a significant impact on the development of Depression, Anxiety and Stress, while the use of Emotion Focused Coping and Problem Focused Coping are an adaptive strategy and they do not cause the development of Psychological Distress.

Further research should be conducted on pregnant women regarding their living circumstances and the specific factors that bring about the psychological distresses. This will be beneficial in the long term where the root of problems can be targeted and solutions can be generated.

Implementation

This research proved to be beneficial in the hospital settings especially in gynecology department as the nurses and the doctors will be able to understand the emotional and psychological wellbeing of expecting mother along with their physical wellbeing.

Secondly, the study will help mental health professionals to understand condition specific mental health issues of pregnant women and will be able to provide more efficient psycho-education to their families. In addition this study will prove to be very helpful for pregnant women as they will be able to comprehend the emotional changes that occur due to the sole fact that they have conceived a child. Also, they will be able to choose more positive coping strategies to overcome their emotional instability.

Moreover, the current study will assist in changing the mindset of the spouse and other family members of pregnant women which will consequently enable the providence of a more comfortable home environment with lesser responsibilities which automatically contributes to lower levels of Depression, Anxiety and Stress.

Limitations and Suggestions

The present study was one of the initial attempts to study the problems of pregnant women in Pakistan, the sample was collected from the province of Punjab only, and it does not include the wide ranging sample of the entire country. Moreover, it only studies the problematic areas of psychological distress, future studies can employ the investigation of other psychological issues and problems that Pakistani pregnant women face.

Further research should also be conducted on pregnant women regarding their living circumstances and the specific factors that bring about the psychological distresses. This will be beneficial in the long term where the root of problems can be targeted and solutions can be generated.

The current study has the sample of adult women who belong to lower socioeconomic status and were mostly, uneducated, hence, a point of consideration, for future researches can be the addition of an educated sample of pregnant women as well as the inclusion of younger sample of pregnant women in Pakistan.

Conclusion

It has been identified that pregnancy is although a time of the anticipation of happy times and the joy of parenthood, it is also accompanied by Psychological Distress. Different women have different ways of coping with these problems, some are effective like the Problem Focused Coping while others like the Active Avoidant Coping is maladaptive. The study has reinforced the importance of the consideration of the context in which the woman is living and the use of situation appropriate coping strategies. If awareness is created upon the matter, familial and social support is provided and women are given a relaxed atmosphere, there will be a significant reduction in the psychological distress of pregnant women and their physical, emotion and psychological well-being will be insured consequently, ensuring the health and well-being of their expected offspring.

References

- Ahmed, B., Ahmed, A., Aqeel, M., Akhtar, T., & Salim, S. (2017). Impact of tinnitus perception on psychological distress in male and female tinnitus patients. *Foundation University Journal of Psychology, 1*(1), 1-26.
- Aasheim, V., Waldenström, U., Rasmussen, S., Espehaug, B., & Schytt, E. (2014). Satisfaction with life during pregnancy and early motherhood in first-time mothers of advanced age: a population-based longitudinal study. *BMC pregnancy and childbirth, 14*(1), 1.
- Abdel-Gawad, I., Badr, H., & Shaban, M. (2005). Physiological effect of natural thumic acid during pregnancy on fetuses and maternal alterations induced by irradiation in rats. *Isotope. Rad. Res, 37*(3), 749.
- Baor, L., & Soskolne, V. (2010). Mothers of IVF and spontaneously conceived twins: a comparison of prenatal maternal expectations, coping resources and maternal stress. *Human Reproduction, 25*(6), 1490-1496.
- Benner, P. (2000). The roles of embodiment, emotion and lifeworld for rationality and agency in nursing practice. *Nursing Philosophy, 1*(1), 5-19.
- Berle, J., Mykletun, A., Daltveit, A., Rasmussen, S., Holsten, F., & Dahl, A. (2005). Neonatal outcomes in offspring of women with anxiety and depression during pregnancy. *Archives of Women's Mental Health, 8*(3), 181-189.
- Borcherding, K. E. (2009). Coping in healthy primigravidae pregnant women. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 38*(4), 453-462.
- Broadhead, W. E., Blazer, D. G., George, L. K., & Tse, C. K. (1990). Depression, disability days, and days lost from work in a prospective epidemiologic survey. *Jama, 264*(19), 2524-2528.
- Brooke, O. G., Anderson, H. R., Bland, J. M., Peacock, J. L., & Stewart, C. M. (1989). Effects on birth weight of smoking, alcohol, caffeine, socioeconomic factors, and psychosocial stress. *Bmj, 298*(6676), 795-801.

- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief cope. *International journal of behavioral medicine*, 4(1), 92-100.
- Chokka, P. (2002). Postpartum Depression: Part 2. *Canadian Journal*, 107.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research. *Psychological bulletin*, 127(1), 87.
- Costa, D. D., Brender, W., & Larouche, J. (1998). A prospective study of the impact of psychosocial and lifestyle variables on pregnancy complications. *Journal of Psychosomatic Obstetrics & Gynecology*, 19(1), 28-37.
- Cisheng, W., Jamala, B., Aqeel, M., Shah, S. M., Ahmed, A., & Gul, M. (2017). The moderating role of spiritual intelligence on the relationship between emotional intelligence and identity development in adolescents. *Foundation University Journal of Psychology*, 1(1), 77-107.
- Da Costa, D., Larouche, J., Dritsa, M., & Brender, W. (1999). Variations in stress levels over the course of pregnancy: factors associated with elevated hassles, state anxiety and pregnancy-specific stress. *Journal of Psychosomatic Research*, 47(6), 609-621.
- Da Costa, D., Larouche, J., Dritsa, M., & Brender, W. (2000). Psychosocial correlates of prepartum and postpartum depressed mood. *Journal of Affective Disorders*, 59(1), 31-40.
- Dayan, J., Creveuil, C., Herlicoviez, M., Herbel, C., Baranger, E., Savoye, C., & Thouin, A. (2002). Role of anxiety and depression in the onset of spontaneous preterm labor. *American journal of epidemiology*, 155(4), 293-301.
- de Tychev, C., Spitz, E., Briançon, S., Lighezzolo, J., Girvan, F., Rosati, A., . . . Vincent, S. (2005). Pre-and postnatal depression and coping: a comparative approach. *Journal of Affective Disorders*, 85(3), 323-326.
- Demyttenaere, K., Maes, A., Nijs, P., Odendaal, H., & Van Assche, F. A. (1995). Coping style and preterm labor. *Journal of Psychosomatic Obstetrics & Gynecology*, 16(2), 109-115.

- Dole, N., Savitz, D. A., Hertz-Picciotto, I., Siega-Riz, A. M., McMahon, M. J., & Buekens, P. (2003). Maternal stress and preterm birth. *American journal of epidemiology*, *157*(1), 14-24.
- Einarson, A., Fatoye, B., Sarkar, M., Lavigne, S. V., Brochu, J., Chambers, C., . . . Schuler, L. (2001). Pregnancy outcome following gestational exposure to venlafaxine: a multicenter prospective controlled study. *American Journal of Psychiatry*.
- Evans, J., Heron, J., Francomb, H., Oke, S., & Golding, J. (2001). Cohort study of depressed mood during pregnancy and after childbirth. *Bmj*, *323*(7307), 257-260.
- Garnefski, N., Legerstee, J., Kraaij, V., van den Kommer, T., & Teerds, J. (2002). Cognitive coping strategies and symptoms of depression and anxiety: A comparison between adolescents and adults. *Journal of adolescence*, *25*(6), 603-611.
- Geerinck-Vercammen, C. R., & Kanhai, H. H. (2003). Coping with termination of pregnancy for fetal abnormality in a supportive environment. *Prenatal diagnosis*, *23*(7), 543-548.
- Giurgescu, C., Penckofer, S., Maurer, M. C., & Bryant, F. B. (2006). Impact of uncertainty, social support, and prenatal coping on the psychological well-being of high-risk pregnant women. *Nursing research*, *55*(5), 356-365.
- Gotlib, I. H., Whiffen, V. E., Mount, J. H., Milne, K., & Cordy, N. I. (1989). Prevalence rates and demographic characteristics associated with depression in pregnancy and the postpartum. *Journal of consulting and clinical psychology*, *57*(2), 269.
- Hamilton, J. G., & Lobel, M. (2008). Types, patterns, and predictors of coping with stress during pregnancy: Examination of the Revised Prenatal Coping Inventory in a diverse sample. *Journal of Psychosomatic Obstetrics & Gynecology*, *29*(2), 97-104.
- Hansen, A. R., Collins, M. H., Genest, D., Heller, D., Schwarz, S., Banagon, P., . . . Leviton, A. (2000). Very low birthweight infant's placenta and its relation to pregnancy and fetal characteristics. *Pediatric and Developmental Pathology*, *3*(5), 419-430.

- Hedegaard, M., Henriksen, T. B., Sabroe, S., & Secher, N. J. (1993). Psychological distress in pregnancy and preterm delivery. *Bmj*, 307(6898), 234-239.
- Hedegaard, M., Henriksen, T. B., Secher, N. J., Hatch, M. C., & Sabroe, S. (1996). Do Stressful Life Events Affect Duration of Gestation and Risk of Preterm Delivery? *Epidemiology*, 7(4), 339-345.
- Huizink, A. C., de Medina, P. G. R., Mulder, E. J., Visser, G. H., & Buitelaar, J. K. (2002). Psychological measures of prenatal stress as predictors of infant temperament. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(9), 1078-1085.
- Johanson, R., Chapman, G., Murray, D., Johnson, I., & Cox, J. (2000). The North Staffordshire Maternity Hospital prospective study of pregnancy-associated depression. *Journal of Psychosomatic Obstetrics & Gynecology*, 21(2), 93-97.
- Jami, H., & Kamal, A. (2017). Myths about hijras (male-to-female transgender of hijra community)? role of gender and commonly held belief about them. *Foundation University Journal of Psychology*, 1(1), 63-76.
- Judd, L. L., Akiskal, H. S., Maser, J. D., Zeller, P. J., Endicott, J., Coryell, W., . . . Mueller, T. I. (1998). A prospective 12-year study of subsyndromal and syndromal depressive symptoms in unipolar major depressive disorders. *Archives of general psychiatry*, 55(8), 694-700.
- Kaye, D. K. (2008). Negotiating the transition from adolescence to motherhood: Coping with prenatal and parenting stress in teenage mothers in Mulago hospital, Uganda. *BMC Public Health*, 8(1), 83.
- Kalsoom, S., Masood, S., & Jami, H. (2017). Psychological well-being and perceived familial social support for patients with hepatitis c: a challenge for health practitioners. *Foundation University Journal of Psychology*, 1(1), 27-47.
- Khan, A., Amanat, A., Aqeel, M., Sulehri, A, N., Amanat, A., Sana, E., & Amin, H. (2017). The mediating role of job stress between social support and development of stress, anxiety and depression in educators and health professionals. *Foundation University Journal of Psychology*, 1(1), 48-62.

- Kelly, R. H., Russo, J., & Katon, W. (2001). Somatic complaints among pregnant women cared for in obstetrics: normal pregnancy or depressive and anxiety symptom amplification revisited? *General Hospital Psychiatry, 23*(3), 107-113.
- Kirchner, T., Muñoz, D., Forns, M., Peñarrubia, J., & Balasch, J. (2011). Identifying by means of coping typologies and primary appraisal the likelihood of positive β -hCG test results in women undergoing IVF treatment: a preliminary study. *Human Reproduction, der028*.
- Kitamura, T., Shima, S., Sugawara, M., & Toda, M. (1993). Psychological and social correlates of the onset of affective disorders among pregnant women. *Psychological medicine, 23*(04), 967-975.
- Kumar, R., Marks, M., Platz, C., & Yoshida, K. (1995). Clinical survey of a psychiatric mother and baby unit: characteristics of 100 consecutive admissions. *Journal of Affective Disorders, 33*(1), 11-22.
- Lazarus, R. S. (1966). Psychological stress and the coping process.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*: Springer publishing company.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy, 33*(3), 335-343.
- Lowenkron, A. H. (1999). Coping with the stress of premature labor. *Health Care for Women International, 20*(6), 547-561.
- Lukse, M. P., & Vacc, N. A. (1999). Grief, depression, and coping in women undergoing infertility treatment. *Obstetrics & Gynecology, 93*(2), 245-251.
- Milgrom, J., Gemmill, A. W., Bilszta, J. L., Hayes, B., Barnett, B., Brooks, J., . . . Buist, A. (2008). Antenatal risk factors for postnatal depression: a large prospective study. *Journal of Affective Disorders, 108*(1), 147-157.
- Montgomery, S. (1995). Safety of mirtazapine: a review. *International Clinical Psychopharmacology, 10*, 37-45.

- Mulder, E., De Medina, P. R., Huizink, A., Van den Bergh, B., Buitelaar, J., & Visser, G. (2002). Prenatal maternal stress: effects on pregnancy and the (unborn) child. *Early human development*, 70(1), 3-14.
- Murray, C. J., & Lopez, A. D. (1997). Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. *The Lancet*, 349(9064), 1498-1504.
- Myors, K., Johnson, M., & Langdon, R. (2001). Coping styles of pregnant adolescents. *Public Health Nursing*, 18(1), 24-32.
- Neter, E., Collins, N. L., Lobel, M., & Dunkel-Schetter, C. (1995). Psychosocial predictors of postpartum depressed mood in socioeconomically disadvantaged women. *Womens Health*, 1(1), 51-75.
- O'CONNOR, T. G., Heron, J., Glover, V., & Team, A. S. (2002). Antenatal anxiety predicts child behavioral/emotional problems independently of postnatal depression. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(12), 1470-1477.
- O'Hara, M. W. (1986). Social support, life events, and depression during pregnancy and the puerperium. *Archives of general psychiatry*, 43(6), 569-573.
- Pagel, M. D., Smilkstein, G., Regen, H., & Montano, D. (1990). Psychosocial influences on new born outcomes: a controlled prospective study. *Social science & medicine*, 30(5), 597-604.
- Pakenham, K. I., Smith, A., & Rattan, S. L. (2007). Application of a stress and coping model to antenatal depressive symptomatology. *Psychology, health & medicine*, 12(3), 266-277.
- Peñacoba-Puente, C., Carmona-Monge, F. J., Marín-Morales, D., & Naber, K. (2013). Coping strategies of Spanish pregnant women and their impact on anxiety and depression. *Research in nursing & health*, 36(1), 54-64.
- Penley, J. A., Tomaka, J., & Wiebe, J. S. (2002). The association of coping to physical and psychological health outcomes: A meta-analytic review. *Journal of behavioral medicine*, 25(6), 551-603.

- Perez, R. G. (1982). *Stress and coping as determinants of adaptation to pregnancy in Hispanic women*. ProQuest Information & Learning.
- Rohe, G. H. (1893). LACTATIONAL INSANITY. Read in the Section of Obstetrics and Diseases of Women, at the Forty-fourth Annual Meeting of the American Medical Association. *Journal of the American Medical Association*, 21(10), 325-327.
- Rondo, P., Ferreira, R., Nogueira, F., Ribeiro, M., Lobert, H., & Artes, R. (2003). Maternal psychological stress and distress as predictors of low birth weight, prematurity and intrauterine growth retardation. *European journal of clinical nutrition*, 57(2), 266-272.
- Rudnicki, S. R., Graham, J. L., Habboushe, D. F., & Ross, R. D. (2001). Social support and avoidant coping: correlates of depressed mood during pregnancy in minority women. *Women & Health*, 34(3), 19-34.
- Simon, G., Ormel, J., VonKorff, M., & Barlow, W. (1995). Health care costs associated with depressive and anxiety disorders in primary care. *American Journal of Psychiatry*, 152(3), 352-357.
- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: a review and critique of category systems for classifying ways of coping. *Psychological bulletin*, 129(2), 216.
- Weissman, M. M., Gammon, G. D., John, K., Merikangas, K. R., Warner, V., Prusoff, B. A., & Sholomskas, D. (1987). Children of depressed parents: increased psychopathology and early onset of major depression. *Archives of general psychiatry*, 44(10), 847-853.
- Wells, K. B., Burnam, M. A., Rogers, W., Hays, R., & Camp, P. (1992). The course of depression in adult outpatients: results from the Medical Outcomes Study. *Archives of general psychiatry*, 49(10), 788-794.
- Westbrook, M. T. (1979). Socioeconomic differences in coping with childbearing. *American Journal of community psychology*, 7(4), 397-412.