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Effects of Partners' Attitudes towards Wife's Aspirations on Depression after Childbirth

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Abstract

A lack of social support for pregnant women is associated with depression after childbirth. However, few studies have examined the impact of the partners' understanding of and support for the women's aspirations (personal goals in life) on the severity of depression after childbirth. To examine the relationship between a partner's attitude to his wife's aspirations and depression after childbirth, a longitudinal study was conducted of 290 primipara women from five university hospitals between October 1997 and March 2000. Three questionnaires were administered to participant women. During their third trimester, they were asked about their aspirations (Aspiration Index) and their perception of their partners' understanding of and support for their aspirations. At one month and three months after childbirth, they were asked about the severity of their depression (Edinburgh Postnatal Depression Scale). Correlation analyses and structural equation modelling showed that the partners' poor understanding and support predicted the severity of depression after childbirth. Perinatal health professionals should be encouraged to assess the pregnant women's aspirations and their partners' understanding and support regarding the women's goals in life.

Keywords

Puerperium, Depression, Aspiration, Life Goal, Social Support

1. Introduction

Depression after childbirth is a serious mental health problem that affects an estimated 7% to 11% of women who have given birth (O'Hara, 1986; O'Hara & Swain, 1996). Predictors of postpartum depression are multifaceted including a past history of psychopathology, a psychological disturbance during pregnancy, a poor marital relationship, low social support, stressful life events, and many other factors (O'Hara & Swain, 1996). A lack of social support is one of such correlates of depression after childbirth. Social support is usually defined as expected or actually provided support by people around the individual. Social support may give directly beneficial effects on psychological well-being or protect persons from the potential adverse effects of stressful events (Cohen & Wills, 1985). The presence of social support prevents postpartum depression (Dennis & Ross, 2006; Corrigan, Kwasky, & Groh, 2015). During the perinatal period, most women listed their partners as the most reliable person whom they sought for social support (Kitamura, Toda, Shima, Sugawara, & Sugawara, 1998). Among mothers of newly born babies, as compared to workplace support, support from family members is a robust predictor of better maternal health (Terry, Rawle, & Callan, 1995). Hence, the partner's support is a very important predictor of the onset of depression after childbirth.

Social support is either perceived by the individual or enacted by other people towards the individual (Barrera, 1986). Its content is multifaceted: emotional, informational, instrumental, and appraisal (Tardy, 1985). Emotional support involves caring. Informational support involves giving advice. Instrumental support involves helping the person in terms of money, time, and skill. Appraisal support involves providing evaluative feedback. These types of support are effective in reducing the stress as well as distress that can arise.

However, individuals may seek different kinds of support. After pregnancy and childbirth, their life changes dramatically. Most of the time, mothers have to continuously focus on child care immediately after childbirth. In addition to daily hassles after childbirth (Arizmendi & Affonso, 1987), mothers face changes or challenges to their interpersonal roles and their life goals (Takegata, Ohashi, Haruna, & Kitamura, 2014). People pursue long-term personal projects—aspirations. It is when they perceive that their projects are going to be threatened that they feel stressed. Although the structure of a person's life goals may be similar across different cultures (Grouzet, Kasser, Ahuvia, Dols, Kim, Lau, & Sheldon, 2005), it is usually considered to be unique, differing from one person to another. Aspirations have different aspects including financial success, affiliation, community feeling, or self-directedness (Kasser & Ryan, 1993).

People's aspirations are related to their psychological well-being (Zika & Chaberlain, 1992; Brunstein, 1993). Studying American university students, Kasser and Ryan (1993) showed that the relative centrality of money-related values and expectations (financial success) was negatively related to students' well-being and mental health. Though very much desired, giving birth to a baby

and taking responsibility for his/her care may lead to a change of a woman's lifestyle. This may, therefore, negatively affect her mental health. For example, a woman may wish to have a baby but at the same time value her career very much so that the time spent for a child's care, though accepted as her responsibility, is felt as extremely burdensome. Hence, the first research question of the present study was to search for specific associations between different types of women's aspirations after childbirth.

In the perinatal period, women's aspirations are likely to be challenged or threatened because they are often isolated from peers and colleagues. Hence, their partner is very likely to be the main or sole provider of social support (Kitamura, Toda, Shima, Sugawara, & Sugawara, 1998). Provision of emotional, instrumental and informational support by the partner is important but his understanding of and subsequent support for the woman's aspirations may function as a buffer against psychological maladjustment. Therefore, women whose partners appreciate and are supportive to the women's aspirations are less likely to feel distressed even if they are aware that their aspirations are, though temporarily, impeded. This is our second research question.

In this study we examined the following hypotheses: (a) depression after childbirth would be predicted by the relative importance of different types of aspirations, and (b) depression after childbirth would be predicted by the absence of the partners' supportive and understanding attitudes towards the women's aspirations.

2. Methods

2.1. Participants

The participants came from the multicentre epidemiological study on perinatal psychiatric disorders (Kitamura, Yoshida, Okano, Kinoshita, Hayashi, Toyoda, & Nakano, 2006). All of 1159 women attending antenatal clinic of the five participating university hospitals from October 1997 to March 2000 were scrutinised. Follow-up surveys of mental health related to pregnancy and childbirth were only conducted with primiparas (66%, $n = 756$). Of the primiparas, twenty (3%) of the women delivered their baby in other hospitals, and 303 (41%) agreed to participate in the study. Of the 303 women, 13 failed to attend the follow-up interviews. Of the 290 participants included in the study, we only used the data of the women who filled out the Edinburgh Postnatal Depression Scale (EPDS: Cox, Holden, & Sagovsky, 1987) questionnaire at both one and three months after childbirth. This resulted in 246 women. Only one woman was unmarried. The mean (SD) ages of the women and their partners were 30.3 (4.5) and 28.7 (5.0) years old, respectively. The majority of the women ($n = 220$, 89.4%) were living with their partner whereas 10.6% of them ($n = 26$) were living apart from their partner. More than half of the participants ($n = 149$) graduated from college or had advanced degrees. We did not ask the women's occupation. We did not perform a power analysis prior to the study because the research was of ex-

planatory nature as well as we were unaware of pervious studies dealing with the current topic.

2.2. Measurement

Women's aspirations and partner's support and understanding: The Aspiration Index (AI; Kasser, 2016) was used to assess the participants' life goals. The AI allows assessment of various goals on various dimensions, and, most importantly, allows for the assessment of the relative centrality of particular goals within an individual's personal goal system (Kasser, 2016). The original version of the AI had 32 items with a 5-point Likert scale and had four domains of aspirations (Self-Acceptance, Affiliation, Community Feeling, and Financial Success). It assesses how the participants perceive each item's importance in life and how likely it will occur. After initially being reported in 1993, the instrument has been revised several times. The original authors added three more domains (Attractive Appearance, Social Recognition, and Physical Fitness) in 1996 (Kasser, 2016). Grouzet et al. (2005) noted that the most recent version has more domains such as Conformity, Safety/Security and Hedonism, resulting in 11 domains. In this study, we used the second version of the index (Kasser, 2016) with seven domains of aspirations. After obtaining permission from the original author, we translated it into Japanese. Also, we shortened this scale to 14 items for use of this study because of the necessity of including other questionnaire items. Each domain consists of two items with a 5-point Likert scale. The scores of each domain range from 2 to 10. The domains include Self-Acceptance (e.g., "be the one in charge of your life"), Affiliation (e.g., "have good friends that you can count on"), Community Feeling (e.g., "work for the betterment of society"), Physical Fitness (e.g., "be healthy physically"), Social Recognition (e.g., "name will be known among many people"), Attractive Appearance (e.g., "follow the styles of hair and clothing"), and Financial Success (e.g., "succeed financially").

The woman's partner's understanding ("How much does your partner understand your aspirations?") and support ("How much does your partner support your aspirations?") of his wife's aspirations were asked with a single 5-point Likert scale.

Perinatal depression: The Edinburgh Postnatal Depression Scale (EPDS: Cox, Holden, & Sagovsky, 1987) was used at one and three months after childbirth to assess depression severity. The EPDS has 10 items with a 4-point Likert scale. It has three subscales: Depression (three items), Anxiety (three items) and Anhedonia (two items) (Kubota, Okada, Aleksic, Nakamura, Kunimoto, Morikawa, & Ozaki, 2014).

Demographic information and obstetrics variables: For the demographic information, the women and their partners were asked their ages and educational backgrounds. For obstetrics variables, the women were asked about the numbers of past pregnancies, deliveries, abortions, stillbirths, and whether they had preterm delivery in the current delivery.

Other variables: The questionnaire covered many other topics and many other variables were asked but will not be reported in the present study.

2.3. Ethical Consideration

This study was approved by the Ethical Committee of Kumamoto University School of Life Sciences.

2.4. Statistical Analysis

Missing values were treated by multiple imputations. The three EPDS subscale scores (Depression, Anxiety, and Anhedonia) were treated as missing if more than half of the items of each subscale were missing.

We calculated means and SD of all of the variables, and the correlations between them. Then we constructed a structural equation model (SEM) to see the relationship between the partner's attitude towards his wife's aspirations and depression at one and three months after childbirth. The fit of each model with the data was examined in terms of several indices: chi-squared (CMIN), comparative fit index (CFI), and root mean square error of approximation (RMSEA). We defined a good fit as CMIN/df < 2, CFI > 0.97, and RMSEA < 0.05, and an acceptable fit as CMIN/df < 3, CFI > 0.95, and RMSEA < 0.08 (Schermelleh-Engell, Moosbrugger, & Müller, 2003). All statistical analyses were conducted by SPSS version 21.0 and, for SEM, Amos version 21.0 (IBM, Tokyo, Japan).

3. Results

There appeared to be little correlation between the women's AI subscale scores and the EPDS subscale scores at one and three months after childbirth (Table 1)

Table 1. Correlation between perinatal depression, wife's aspirations and partner's attitude to wife's aspirations.

Perinatal depression variables	W1ANX (222)	W1DEP (222)	W1ANH (222)	W2ANX (217)	W2DEP (217)	W2ANH (217)
Wife's aspirations						
Self acceptance	0.07	0.03	0.40	0.03	−0.01	−0.14
Affiliation	0.04	0.06	0.03	−0.08	−0.17	−0.03
Community feeling	0.09	0.06	−0.08	0.06	0.00	−0.17*
Physical fitness	−0.05	−0.09	−0.25	−0.01	−0.22	−0.13
Social recognition	−0.01	−0.00	−0.06	0.07	0.10	−0.01
Attractive appearance	0.03	−0.08	−0.04	0.12	−0.05	0.03
Financial success	−0.05	−0.08	0.12	0.11	0.02	−0.05
Partner's attitude to wife's aspirations						
Understanding	−0.12	−0.18*	−0.13	−0.12	−0.29***	−0.17*
Support	−0.10	−0.17*	−0.06	−0.19**	−0.23**	−0.15*

Note. W1, 1 month after childbirth; W2, 3 months after childbirth; ANX, Anxiety subscale; DEP, Depression subscale; ANH, Anhedonia subscale; *$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

except for the correlation between the community feeling scores and the anhedonia scores three months after childbirth ($p < .05$). The partners' understanding and support of the women's aspirations were both significantly correlated with the subscales of the EPDS at one month and three months after childbirth. In addition, the partners' support scores correlated significantly with the anxiety and anhedonia subscales at three months after childbirth (Table 1).

Because the EPDS subscales were correlated with the partners' understanding and support scores but not with the women's AI subscales, we constructed a SEM model without the AI subscale scores (Table 2).

In our SEM model (Figure 1), we made the partner's attitude towards wife's

Table 2. Correlations between and means and SDs of variables used for the SEM.

	1	2	3	4	5	6	7	8
1 Partners' support	---	0.66**	−0.17**	−0.10**	−0.06*	−0.23**	−0.19**	−0.15**
2 Partners' understanding	0.66**	---	−0.18**	−0.12**	−0.13**	−0.29**	−0.20**	−0.17**
3 Depression 1 month	−0.17**	−0.18**	---	0.58**	0.51**	0.39**	0.36**	0.20**
4 Anxiety 1 month	−0.10**	−0.12**	0.58**	---	0.38**	0.35**	0.53**	0.12**
5 Anhedonia 1 month	−0.06*	−0.13**	0.51**	0.38**	---	0.19**	0.34**	0.23**
6 Depression 3 months	−0.23**	−0.29**	0.39**	0.35**	0.19**	---	0.54**	0.35**
7 Anxiety 3 months	−0.19**	−0.20**	0.36**	0.53**	0.34**	0.54**	---	0.26**
8 Anhedonia 3 months	−0.15**	−0.17**	0.20**	0.12**	0.23**	0.35**	0.26**	---
Mean	4.1	4.0	1.1	2.5	0.6	0.6	1.5	0.2
SD	0.8	0.9	1.6	2.1	1.1	1.2	1.7	0.5

*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.
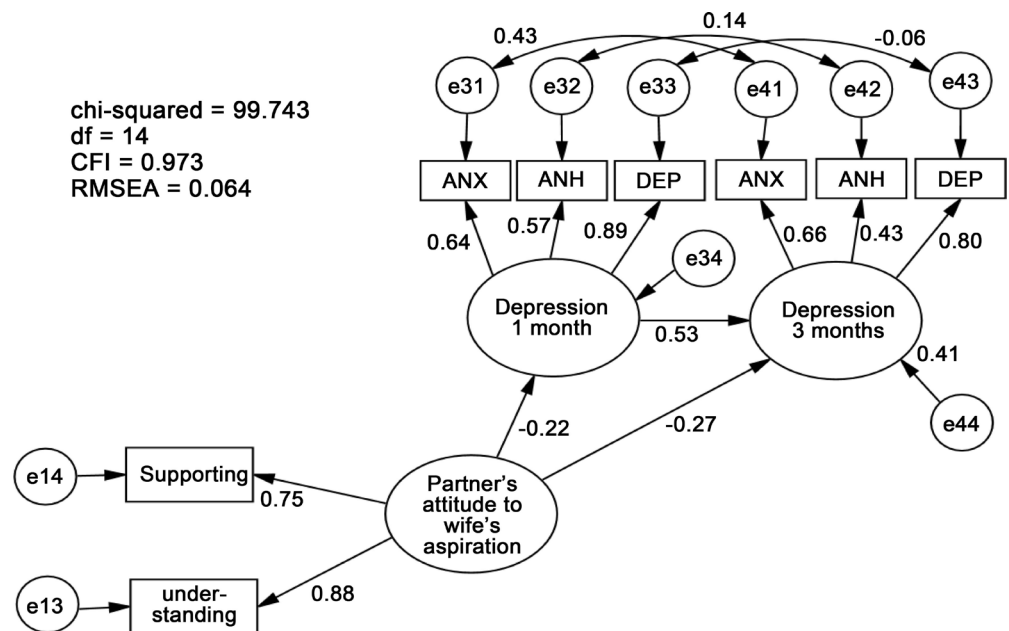
Note. ANX, Anxiety subscale; DEP, Depression subscale; ANH, Anhedonia subscale. All paths are standardised. Estimates are all significant.

Figure 1. Path diagram of partner's attitude to wife's aspirations and depression after childbirth.

aspirations a latent variable, which was constructed by the two items of perceived understanding and support of women's aspiration. We also posited two more latent variables—depression at one month and three months after childbirth. Each of them was constructed by the three EPDS subscale scores. We hypothesized that the partner's attitude to his wife's aspirations would influence depression at one month and three months after the childbirth. Also expected was the prediction of the amount of depression three months after childbirth by the amount of depression one month after childbirth. Each error variable of the EPDS subscale scores were correlated between one month and three months after childbirth. This model showed almost a good fit (chi-squared/df = 7.1, CFI = 0.973, and RMSEA = 0.064). Since all regression paths were significant, we did not "trim" the model (Klein, 2005: p. 145-147). The total effect of the Partners' Attitude to his Wife's Aspirations on Depression at one month and three months after childbirth were −0.22 and −0.27 respectively. Also the indirect effect of the Partners' Attitude to the Wife's Aspirations at three months after childbirth was −0.12.

4. Discussion

Unexpectedly, we found no clear relationships between women's aspiration domains and EPDS scores at one and three months after childbirth. Schumuck, Kasser and Ryan (2000) asked college students about their aspirations and found that students who were characterised by the intrinsic goals of aspirations (e.g., self-acceptance, affiliation, and community feeling) scored greater in psychological well-being, whereas the reverse was true for a focus on extrinsic goals (e.g., financial success, appearance, and social recognition). Other studies also showed negative associations between psychological well-being and financial success and a positive association with affiliation (Kasser & Ryan, 1993; Kasser & Ryan, 1996). We failed to replicate these findings. This may be due to different characteristics of study populations. Kasser and his colleagues' studies were based on a college student population whereas our study was based on a pregnant and childbearing female population.

A unique finding of our study is that the less desirable partners' attitudes towards the women's aspirations were, the greater the severity of depression after childbirth. A partner is the most important person as a resource of "perceived" social support in the perinatal period in Japan (Kitamura, Toda, Shima, Sugawara, & Sugawara, 1998). Compared with Western countries, the self-construal in Japanese people becomes most meaningful and complete when it is cast in the appropriate social relationship (Markus & Kitayama, 1991). This may be tightly linked to the collectivistic culture of Japan (Chiao & Blizinsky, 2009). Therefore, the perception that they are understood and supported in their aspirations by their partner may be meaningful for Japanese women. Japanese women may identify their goals in life in the interpersonal framework with their partner. Their partners' understanding and support may be of great importance for the

women to maintain their psychological adjustment.

Our study also showed that a partner's attitude to his wife's aspirations was slightly stronger in predicting depression at three months than at one month after childbirth. As compared with life conditions at one month after childbirth, women at three months after childbirth may be more accustomed to child care and, therefore, have more time to consider about what is going on—their life goals. In such a situation, the partners' understanding about the women's future direction may be a more important determinant of psychological well-being.

In a clinical situation, perinatal health professionals including midwives, nurses, and obstetricians should be encouraged to talk with pregnant women about their aspirations such as one's value for life goals. This may be in the context of the women's relationships with their partners. If necessary, perinatal health professionals may want to intervene in the marital relationship in such a way that enables the couple to share and support mutual life goals. The perinatal period may be an excellent occasion to review the marital relationship thus far and reconstruct mutual life goals with a baby on the way. This may be used as a preventative measure against depression after childbirth.

Limitations of this should be discussed. In this study, we based the assessment of a partner's attitudes towards his wife's aspirations on the self-reporting by women. It may be equally important to assess the partner's report about their understanding of and support for the spousal aspirations. The present study focused on primiparous women. Multiparous women may demonstrate different patterns about the links between their partners' attitudes and depression after childbirth. Caution should also be exercised for the assessment of depression. Our assessment of depression was based on the women's self-reported outcomes. A structured diagnostic interview yielding depressive disorder may be necessary for further studies. Another drawback of this study was a lack of factors that led to the partners' attitudes towards the women's aspirations. Marital adjustment prior to pregnancy, intimate partner violence, personalities of the women and their partner are just a few of correlated factors worth investigating.

5. Conclusion

Our study indicated that a partner's attitudes towards his wife's aspirations could predict depression after childbirth.

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References

Arizmendi, T. G., & Affonso, D. D. (1987). Stressful Events Related to Pregnancy and Postpartum. *Journal of Psychosomatic Research*, *31*, 743-756. https://doi.org/10.1016/0022-3999(87)90023-7

Barrera Jr., M. (1986). Distinctions between Social Support Concepts, Measures, and Models. *American Journal of Community Psychology*, *14*, 413-445. https://doi.org/10.1007/BF00922627

Brunstein, J. C. (1993). Personal Goals and Subjective Well-Being: A Longitudinal Study. *Journal of Personality and Social Psychology*, *65*, 1061-1070. https://doi.org/10.1037/0022-3514.65.5.1061

Chiao, J. Y., & Blizinsky, K. D. (2009). Culture-Gene Coevolution of Individualism-Collectivism and the Serotonin Transporter Gene. *Proceedings of the Royal Society B, 277*, 529-537. https://doi.org/10.1098/rspb.2009.1650

Cohen, S., & Wills, T. A. (1985). Stress, Social Support, and the Buffering Hypothesis. *Psychological Bulletin*, *98*, 310-357. https://doi.org/10.1037/0033-2909.98.2.310

Corrigan, P. C., Kwasky, N. A., & Groh, C. J. (2015). Social Support, Postpartum Depression, and Professional Assistance: A Survey of Mothers in the Midwestern United States. *Journal of Perinatal Education*, *24*, 48-60. https://doi.org/10.1891/1058-1243.24.1.48

Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of Postnatal Depression. Development of the 10-Item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, *150*, 782-786. https://doi.org/10.1192/bjp.150.6.782

Dennis, C. L., & Ross, L. (2006). Women's Perceptions of Partner Support and Conflict in the Development of Postpartum Depressive Symptoms. *Journal of Advanced Nursing*, *56*, 588-599. https://doi.org/10.1111/j.1365-2648.2006.04059.x

Grouzet, F. M. E., Kasser, T., Ahuvia, A., Dols, J. M. F., Kim, Y., Lau, S., & Sheldon, K. (2005). The Structure of Goal Contents across 15 Cultures. *Journal of Personality and Social Psychology*, *89*, 800-816. https://doi.org/10.1037/0022-3514.89.5.800

Kasser, T. (2016). *Aspiration Index.* [Supplemental Material] Retrieved from http://faculty.knox.edu/tkasser/aspirations.html

Kasser, T., & Ryan, R. (1993). A Dark Side of the American Dream: Correlates of Financial Success as a Central Life Aspiration. *Journal of Personality and Social Psychology*, *65,* 410-422. https://doi.org/10.1037/0022-3514.65.2.410

Kasser, T., & Ryan, R. (1996). Further Examining the American Dream: Differential Correlates of Intrinsic and Extrinsic Goals. *Personality and Social Psychology Bulletin*, *22*, 280-287. https://doi.org/10.1177/0146167296223006

Kitamura, T., Toda, M. A., Shima, S., Sugawara, K., & Sugawara, M. (1998). Social Support and Pregnancy: I. Factorial Structure and Psychosocial Correlates of Perceived Social Support. *Psychiatry and Clinical Neurosciences, 52,* 29-36. https://doi.org/10.1111/j.1440-1819.1998.tb00969.x

Kitamura, T., Yoshida, K., Okano, T., Kinoshita, K., Hayashi, M., Toyoda, N., & Nakano,

H. (2006). Multicentre Prospective Study of Perinatal Depression in Japan: Incidence and Correlates of Antenatal and Postnatal Depression. *Archives of Women's Mental Health, 29,* 121-130. https://doi.org/10.1007/s00737-006-0122-3

Klein, R. B. (2005). *Principles and Practice of Structural Equation Modelling* (2nd ed.). New York: Guilford Press.

Kubota, C., Okada, T., Aleksic, B., Nakamura, Y., Kunimoto, S., Morikawa, M., & Ozaki, N. (2014). Factor Structure of the Japanese Version of the Edinburgh Postnatal Depression Scale in the Postpartum Period. *PloS One, 9,* e103941. https://doi.org/10.1371/journal.pone.0103941

Markus, R. H., & Kiyatama, S. (1991). Culture and the Self: Implications for Cognition, Emotion, and Motivation. *Psychological Review, 98,* 224-253. https://doi.org/10.1037/0033-295X.98.2.224

O'Hara, M. W. (1986). Social Support, Life Events, and Depression during Pregnancy and the Puerperium. *Archives of General Psychiatry, 43,* 569-576. https://doi.org/10.1001/archpsyc.1986.01800060063008

O'Hara, M. W., & Swain, A. M. (1996). Rates and Risk of Postpartum Depression: A Meta-Analysis. *International Review of Psychiatry, 8,* 37-54. https://doi.org/10.3109/09540269609037816

Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the Fit of Structural Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures. *Methods of Psychological Research Online, 8,* 23-74.

Schumuck, P., Kasser, T., & Ryan, R. M. (2000). Intrinsic and Extrinsic Goals: Their Structure and Relationship to Well-Being in German and U.S. College Students. *Social Indicators Research, 50,* 225-241. https://doi.org/10.1023/A:1007084005278

Takegata, M., Ohashi, Y., Haruna, M., & Kitamura, T. (2014). Theoretical Framework for Interpersonal Psychotherapy in the Prevention of Postpartum Depression: A Commentary. *International Journal of Nursing and Health Science, 1,* 37-40.

Tardy, C. H. (1985). Social Support Measurement. *American Journal of Community Psychology, 13,* 187-202. https://doi.org/10.1007/BF00905728

Terry, D. J., Rawle, R., & Callan, V. J. (1995). The Effects of Social Support on Adjustment to Stress: The Mediating Role of Coping. *Personal Relationships, 2,* 97-124. https://doi.org/10.1111/j.1475-6811.1995.tb00080.x

Zika, S., & Chaberlain, K. (1992). On the Relation between Meaning in Life and Psychological Well-Being. *British Journal of Psychology, 83,* 133-145. https://doi.org/10.1111/j.2044-8295.1992.tb02429.x