INTERNATIONAL JOURNAL OF ADVANCED RESEARCH
ISSN: 3106-7980: 3106-7972
Volume 3, Issue 2, 2026

RELATIONSHIP QUALITY AS A PREDICTOR OF COGNITIVE FAILURE AND PERCEIVED STRESS IN MARRIED WOMEN WITH OVERSEAS-MIGRANT HUSBANDS

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DOI: https://doi.org/10.5281/zenodo.21531928

Keywords
Relationship quality, cognitive failures, perceived stress, transnational marriage, left-behind wives, Pakistan

Article History
Received: 28 April 2026
Accepted: 15 June 2026
Published: 30 June 2026

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Abstract

The phenomenon of transnational marriage is taking root in many developing countries. Nonetheless, only few studies have addressed the subject of the impact of marital quality on the cognitive abilities and emotional health of the wives. The purpose of this study was to investigate the relationship between relationship quality's positive and negative dimensions in prediction of cognitive failures and perceived stress in married women with husbands working abroad and to determine whether there are differential effects of each of the two dimensions. The design of the study was cross sectional quantitative and sample consisted 300 married women from Gujrat (Pakistan) with husbands who were working abroad. The Positive and Negative Relationship Quality Scale (PN-RQ), the Cognitive Failures Questionnaire (CFQ-15) and the Perceived Stress Scale (PSS-10) were all completed by the participants. Pearson correlations and multiple regression analyses were applied to analyze data. Results indicated that positive relationship quality was a significant negative predictor of both cognitive failures ($p < .001$, $\beta = -.556$) and perceived stress ($p < .001$, $\beta = -.693$), and negative relationship quality was a significant positive predictor of both ($p < .001$, $\beta = .386$ for cognitive failures; $\beta = .233$ for perceived stress), with models accounting for 87.5% and 84.9% variance respectively. Positive relationship quality was found to be a better predictor of both outcomes. Perceived stress had a strong positive correlation with cognitive failures ($r = .927$, $p < .001$). Overall, these results suggest that relationship quality, especially positive aspects—warmth, emotional support and intimacy—is an important protective factor regarding women's cognitive and emotional functioning in transnational marriage. The study demonstrates the need to strengthen the relationship of the left-behind wives in migration affected families with relationship strengthening interventions and supportive policies.

Introduction

Marriage is a basic social structure that has a broad and deep impact on individual happiness, physical health and psychological health (Rogge et al., 2017). The quality of a marital relationship is a known powerful predictor of mental and physical health consequences (Rogge et al., 2017). Much of this work, however, has been in the context of co-residency and stability, and few studies have examined the quality of the couple's relationship in situations where the couple has been separated for extended periods of time, as often happens when one member of the couple migrates and/or works abroad. This is a notable gap especially in the context of global proliferation of transnational marriage (Straiton et al., 2019) in which one of the parties moves to their partner's country for employment.

Economic pressures and a shortage of employment opportunities are increasing the occurrence of husbands working in other countries, leaving their wives in their home country in potentially many developing countries. Marriage exists for married women living far from their husbands as a different type of relationship, lived mainly through letters and phone calls, and lacking the constant physical, emotional and job-sharing arrangements of marriage in "real life". Academic studies conducted on transnational marriages suggest that such a split is a unique set of difficulties, especially for women, who may over time suffer from chronic stress, social isolation and poor health (Straiton et al., 2019). These problems could have wide reaching impact on women's cognitive and emotional health.

Study evidence on marriage and health outcomes consistently attests to the relationships between marital quality and health outcomes for both spouses (Rogge et al., 2017). Researchers who have adapted the stress process model to the study of intimate relationships have shown that cognitive decline and strain in these relationships are closely interwoven; when health problems occur in an intimate partnership, they either lead to tensions that can exacerbate strain in the relationship for both parties, or the person perceives stress but the other does not (Li et al., 2026). Wives have been known to experience higher marital strain ratings as a result of their husbands. Difficulties with cognition can undermine the ability to share meanings, exchange and understand each other, which are integral components of marital relationships (Li et al., 2026). This indicates that the quality of marital relationship may be similarly related to women's cognitive functioning when separated from husbands.

Today's measurement methods have theorized relationship quality as bi-dimensional, acknowledging the positive and negative dimensions of a relationship as independent but related bids (Rogge et al., 2017). They created a Positive-Negative Relationship Quality Scale (PN-RQ) to measure these two dimensions separately and give researchers the power to understand the role of positive dimensions (warmth, support, intimacy) and negative dimensions (conflict, criticism, tension) individually and uniquely (Rogge et al., 2017). Effort towards supporting the bidimensionality of the construct have been done in many countries, such as in Poland (Papińska & Kuncewicz, 2021) and in Turkey (Araz et al., 2019). This 2-dimensional approach is also in line with the research in the effect literature indicating that positive and negative experiences are substantively distinct and best measured separately.

Moreover, studies have indicated that how relationships fare can impact cognitive functioning in a variety of ways. Individual differences in the subjective experience of everyday cognitive failures can be assessed using the Cognitive Failures Questionnaire (CFQ) developed by Broadbent et al (1982). Individuals' scores on the CFQ have been found to correlate with actual outcomes like the risk of having an accident, with errors in performance on an objective task, and with brain activity while performing on a cognitive task (Broadbent et al., 1982). Importantly, higher CFQ scores are associated with greater negative affect – such as depression, anxiety and stress – (Broadbent et al., 1982). This implies that emotional experiences and the quality of the relationship could have a marked impact on cognition.

Women who are outside of marriage, either because of husband working abroad, are a vulnerable group. The duties these women have of managing

households, raising children and carrying out family responsibilities while their husbands are away is challenging (Ahmed, 2020). Transnational marriages also create psychological problems for separated partners, such as sense of loss, feelings of loneliness and isolation (Pongthippat et al., 2024). Due to the prolonged absences of husbands, left-behind wives manage the chores, finances and taking care of the children all by themselves, causing them to be emotionally stressed and burdened (Ahmed, 2020). Research indicates that, labor migration exacerbates gender disparities in household care duties and left-behind mother's report experiences of loneliness and the increased burden of caring duties as a single caregiver (Nguyen et al., 2025). Straiton et al., (2019) found that, for example, Thai immigrant women in transnational marriages experienced the general stressors of initial culture shock, employment difficulties, and loneliness, all of which contribute to their chronic stress and health outcomes over time. The coupled effects of isolation and concern about the health and safety of their separated husbands adds to the stress situation, along with the uncertainty on the prospects of a reunion and the financial stability of the husband.

Significance of the Study

The present study contributes to the literature by taking relationship quality as predictor of cognitive failures and perceived stress experiencing by the married women whose husbands work in another country. Although it is well documented that marital quality and health outcomes are linked in cohabiting couples (Rogge et al., 2017), there is less research on the role of relationship quality for an extended period of separation resulting from migration. The study draws on the existing literature on transnational marriage, and it does so in more nuanced ways, recognizing both positive and negative aspects of relationships (warmth, support, intimacy; conflict, criticism, tension) in a bidimensional approach (Rogge et al., 2017) in order to examine empirical evidence of how relationship quality impacts cognitive and emotional well-being among those who are left behind. Furthermore, the study adds to the literature on cognitive failures and stress - by analyzing both in a new population. Factors that increase the likelihood of cognitive failure are important to understand, particularly where an understanding will lead to real world implications such as increased risk of accidents, and decreased quality of life (Broadbent et al., 1982) amongst females who run a household alone. The findings have implications for mental health professionals and policy makers in the context of families of labor migrants. Results indicated that the quality of the relationship is a significant predictor of cognitive failure and the perception of stress, thus signifying the need to invest in developing the functioning of relations in order to improve psychological wellness among women, whose husbands are migrants.

Literature Review

Conceptual Framework: The present study builds upon the stress process model and the bi-dimensional conceptualization of relationship quality (warmth, support, intimacy; Rogge et al., 2017) and suggests that relationship quality will include positive quality (warmth, support, intimacy) and negative quality (conflict, criticism, tension). It is important to note that a high-quality relationship is thought of as a protective resource which could buffer against stressors and cognitive failures, and a low-quality relation as a stressor which could increase stress and cognitive failures. This is aligned with studies showing a strong link between the quality of family life and cognitive and emotional health (Li et al., 2026). The bi-dimensional approach permits to test the differential predictive power of positive and negative relationship qualities (Rogge et al., 2017).

Relationship Quality and Cognitive Failures: Cognitive failures are normal in daily living, routine failures in perception, memory, and action that have been associated with many psychological and environmental variables. The CFQ was developed by Broadbent et al (1982) and is still a frequently used scale of individual different subjective cognitive lapses. Negative affect, such as depression, anxiety and stress are consistently associ-

ated with higher CFQ scores, and increased resilience and life satisfaction with lower scorers (Broadbent et al., 1982). This indicates that everyday cognitive failures are importantly affected by emotional well-being.

One study on marital relationship quality and cognitive function demonstrated that wives' perceptions of marital strain are higher when their husbands have cognitive dysfunction (Li et al., 2026). This finding indicates that the relationship is bidirectional between cognitive functioning and relationship. Cognitive impairment can negatively affect the communicative and interactive abilities that are crucial for the function of a relationship and lead to role overload and heightened marital strain (Li et al., 2026). The situation might be especially pertinent for women away from their husbands, in which emotional communication needs a lot of cognitive and emotional work.

According to the stress process model stressors such as relationship conflict can deplete limited cognitive resources, which makes it harder to complete tasks in everyday life. In relationship situations with tension and conflict, individuals can become distracted and think of issues that do not relate to the task being done, making it harder for them to concentrate and leading to more cognitive failures. On the other hand, supportive relationships can foster emotional security that can safeguard cognitive resources. Using the two-dimensional view of relationship quality provides insight into the unique positive and negative relationship qualities that influence relationships' cognitive outcomes (Rogge et al., 2017).

Relationship Quality and Perceived Stress: Relationship between marital quality and perceived stress has also interested the literature. The Perceived Stress Scale (PSS-10) was designed to measure the extent to which people are feeling unpredictable, uncontrollable and overloaded in their lives (Cohen et al., 1983) and draws on the foundation of the theoretical framework of psychological stress appraisal theory. Using the stress process model in dyadic studies has shown that health stressors, like cognitive impairments, can create a strain for both individuals (Li, et al., 2026). The ambivalence and conflict that some relationships are very clear is intensified by this strain.

Stress in women with an overseas husband might be compounded by the struggle of sustaining an intercountry relationship and by having to take on household and family duties without their husband's help (Irbah et al., 2025). Studies of transnational marriages have highlighted the psychological challenges which separated partners might experience, such as loss, loneliness and isolation (Straiton et al., 2019). Thai immigrant women in transnational marriages in a study were found that over time, initial culture shock, employment, transnational relations, marital patterns and social networks all interacted to shape women's health and wellbeing (Pongthippat et al., 2024). In long-distance relationships, there are no daily emotional supports; in addition, there is uncertainty in the relationships that can lead to aggravation of the impact of the quality of the relationship on perceived stress.

Positive versus Negative Relationship Quality: Positive and negative dimensions of relationships both are relevant, but may have differential predictive effects. As per the bidimensional conceptualization positive and negative evaluations may be better assessed separately, as this may provide more insights into the functioning of the relationship (Rogge et al., 2017). However, positive and supportive relationships with family members and friends can be important in itself and act as a buffer against stress, contrary to negative relationships that can have a more direct influence depending on the day to day experience of conflict and criticism.

Some quality of relationships was found to be positive or negative, relevant in the context of separation. For females, with spouses abroad, positive relationship attributes could be particularly vital because they offer emotional ties and security, the absence of which can be made up for by physical absence. On the other hand, the negative could not be as powerful given that in a "no-cohabitation" set up there is less conflict. Accordingly, positive relationship quality level might become the greater predictor of cognitive failures and perceived stress. The PN-RQ measure has been developed based on

Item Response Theory which optimizes the measurement of positive and negative relationship qualities separately and provides the precision required to study the effects of these qualities in differential impact.

The Association between Cognitive Failures and Stress: There has been a consistent finding of a relationship between well-being outcomes and cognitive failures (Broadbent et al., 1982). Research indicates that people with higher negative well-being have more attention, memory and action issues than others (Broadbent et al., 1982). Cognition and stress are linked in a two-way street. Cognitive failure brings about stress and stress can bring about cognitive failure: when stress takes up your cognitive resources, then you make more cognitive errors, and when you make more cognitive errors, you experience more stress, because something is broken and there is more work to be done. The CFQ's highest scores have been correlated with depression, anxiety and stress (Broadbent et al., 1982).

Hypotheses

Based on the theoretical framework and empirical literature reviewed above, and consistent with the findings of the present study, the following hypotheses are proposed:

H1: Married women with husbands working abroad who report a more positive relationship tend to experience fewer cognitive failures, like forgetfulness or trouble focusing.

H2: Those who report a more negative relationship tend to experience more cognitive failures.

H3: A more positive relationship is associated with lower levels of perceived stress among these women.

H4: A more negative relationship is associated with higher levels of perceived stress.

H5: There's a clear link between cognitive failures and perceived stress, when one goes up, the other tends to go up as well.

RQ1: Do positive and negative relationship qualities have distinct effects on cognitive failures and perceived stress?

The following comparative research question (RQ1) is also addressed in the present study on top of the above-mentioned directional research hypotheses. Whereas H1-H4 test the individual predictive power of positive or negative relationship quality for each of the outcomes, RQ1 aims at testing whether there is (or is not) differential predictive power between the two dimensions of relationship quality, and H5 tests the relation between cognitive failures and perceived stress. Theoretically this question is rooted in the bidimensional conceptualization of relationship quality (Rogge et al., 2017), which suggests that positive and negative evaluations of a relationship are separate constructs and not the extremes of a continuum. Empirically, positive qualities (warmth, support) and negative qualities (conflict, criticism) can be asymmetric with regard to well-being (Rogge et al., 2017; Li et al., 2026). For individuals in transnational marriages, this imbalance could be particularly evident, as there is greater potential for distance to dampen conflict intensity but also greater need for emotional closeness to span across that distance (Straiton et al., 2019; Kutor & Arku, 2025). RQ1, therefore, makes an explicit test of whether there are differential effects of positive and negative relationship qualities, with implications for both of the bidimensional model and for the design of interventions.

Methodology

Research Design: In order to investigate the predictive nature of relationship quality (positive/negative dimensions) to two outcome variables (cognitive failures and perceived stress) amidst married women with husbands working abroad, the present study adopted a cross-sectional research design with quantitative approach. Since the purpose of this study was to determine associations between variables in one period of time it was determined that the cross-sectional design was appropriate.

Participants: The sample consisted of 300 married women whose husbands were currently employed overseas. Convenience and snow ball sampling were used to recruit participants from Gujrat, Pakistan. The inclusion criteria were (a) currently

married (b) husband is abroad and his stay is only for the purpose of employment [confirm] (c) willing to participate in a voluntary manner. For those with husbands temporarily not living in the home country, such as those on vacation, the person was still accounted for if the main residence was overseas. Those women who were widowed, divorced or in which husbands returned permanently were excluded.

The following information on demographics was collected: education (coded 1 = Primary to 4 = Postgraduate), years married (M = 7.07 years, SD = 1.81), and number of years husband has been abroad (M = 5.51, SD = 1.76). Detailed demographic characteristics are given in the Results section Table 1.

Measures

Relationship Quality: Relationship quality was measured the Positive and Negative Relationship Quality Scale (PN-RQ) created by Rogge et al (2017). The PN-RQ is a two-dimensional instrument to distinguish positive and negative relationship appraisals separately. Positive Relationship Quality (warmth, support, intimacy) and Negative Relationship Quality (conflict, criticism, tension) are the two subscales of the scale. Each item was rated as 0= Not at all true, 1=A little true, 2=Somewhat true, 3= Mostly true, 4= very true, 5=Completely true. Positive scores are used to reflect relationship quality, with higher scores reflecting better relationship functioning, and negative scores are used to reflect poorer relationship functioning. The PN-RQ has exhibited good psychometric qualities in a wide variety of populations, such as Polish (Papińska & Kuncewicz, 2021) and Turkish (Araz et al., 2019) populations. Good internal consistency was found for the Positive Relationship Quality subscale (alpha = .986) and the Negative Relationship Quality subscale (alpha = .978) in the current study.

Cognitive Failures: Everyday cognitive lapses were assessed with the 15 item version of the Cognitive failures Questionnaire (CFQ-15) developed by Broadbent et al (1982). The CFQ-15 is a self-report questionnaire designed to examine reported memory, perceptual and motor impairments in everyday life. Some questions are: 'Do you forget what you are doing when moving from one room to another in the house?', and 'Do you fail to notice signposts on the road?'. Participants answered the question on a scale, for example, 0 = Never to 4 = Very often. Scores on this scale can fall between 0–60 with high scores representing a higher incidence of cognitive failures.

The CFQ is currently one of the most popular questionnaires on everyday cognitive errors and it has been shown to have solid relations with self-reported real-world errors, such as accidents risk and performance on objective tasks (Broadbent et al., 1982). The Scale was shown to have excellent internal consistency (α = .962) in the present sample.

Perceived Stress: Perceived stress was assessed with Cohen, Kamarck and Mermelstein's (1983) Perceived Stress Scale (PSS-10). The PSS-10 measures how stressful the individual rates situations in his/her life during the past month. Items assess the degree to which the respondent felt their life to be out of control, topsy-turvy and overburdened. Sample items from the ego subgroups are: In the past month, how often have you felt nervous and stressed? And, In the past month, how often have you felt that things were going your way? Respondents make responses on a five-point scale that ranges from 0 = Never to 4 = Very Often. The total score is from 0–40, with higher scores representing higher perceived stress.

The PSS-10 has exhibited satisfactory psychometric properties when administered to various groups of people and has been adapted to many cross-cultural settings (Sischka et al., 2024). This scale showed very good internal consistency with α = .957 in the present study.

Procedure: Data were collected through paper-based questionnaires over a period of 4 months. Participants were recruited through social media platforms (Facebook, WhatsApp), and snowball sampling.

The survey package included:

1. An informed consent form explaining the purpose of the study, voluntary participation, confidentiality, and the right to withdraw at any time.

2. A demographic information sheet
3. The Positive and Negative Relationship Quality Scale (PN-RQ)
4. The Cognitive Failures Questionnaire (CFQ-15)
5. The Perceived Stress Scale (PSS-10)

The questionnaire took approximately [15-20] minutes to complete. All participants provided informed consent prior to participation. Data were collected anonymously to ensure confidentiality.

Data Analysis Plan: SPSS version 27 was used to analyze the data. Previously, all data were subjected to reliability analysis (Cronbach's α), descriptive statistics (mean, SD and range), and bivariate correlation (Pearson product-moment correlation). Two separate multiple regression analyses were carried out to determine whether relationship quality (positive and negative) predicted cognitive failures and perceived stress. Initial correlation analyses found that there was no significant correlation between the demographic variables and the outcome variables so they were not included as covariates. Both Positive Relationship Quality and Negative Relationship Quality were simultaneously used as predictors in the regression models.

The following regression models were tested:

Model	Dependent Variable	Predictors
Model 1	Cognitive Failures (CFQTOTAL)	PRQSTOTAL, NRQSTOTAL
Model 2	Perceived Stress (PSSTOTAL)	PRQSTOTAL, NRQSTOTAL

Statistical significance was set at $p < .05$ for all analyses.

Ethical Considerations: All participants were informed about the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any time without any consequences. Anonymity and confidentiality of responses were ensured. No incentives were provided for participation.

Results

Preliminary Analyses

Reliability of Scales: Internal consistency for all measures was examined using Cronbach's alpha. All scales demonstrated excellent reliability: Positive Relationship Quality (α = .986), Negative Relationship Quality (α = .978), Cognitive Failures Questionnaire (α = .962), and Perceived Stress Scale (α = .957).

Descriptive Statistics

Table 1: *Descriptive Statistics for All Study Variables (N = 300)*

Variable	Range	Minimum	Maximum	Mean	Std. Deviation
Age	35	19	54	27.85	6.402
Education	3	1	4	2.42	1.004
Marriage Duration	10.00	2.00	12.00	7.0733	1.81446
Employment Duration	8.00	2.00	10.00	5.5133	1.76073
Positive Relationship Quality	41.00	.00	41.00	21.4867	15.67340
Negative Relationship Quality	40.00	.00	40.00	20.8467	14.17720
Cognitive Failures	54.00	5.00	59.00	36.8333	17.07525
Perceived Stress	38.00	2.00	40.00	24.2567	12.21398

Bivariate Correlations

Table 2: *Pearson Correlations Among Study Variables (N = 300)*

Variable	1	2	3	4	5	6	7
1. Age	—						
2. Marriage Duration	-.186**	_—					
3. Employment Duration	-.096	.823**	—				
4. Positive RQ	.003	.090	.087	—			
5. Negative RQ	.019	-.105	-.088	-.969**	—		
6. Cognitive Failures	.001	-.034	-.043	-.931**	.925**	—	
7. Perceived Stress	-.078	-.001	-.013	-.920**	.905**	.927**	—

Note: RQ = Relationship Quality. ** p < .01 (2-tailed).

Negative relationships were strongly associated with women's ratings of Positive Relationship Quality, which had significant negative correlation with women's ratings of Cognitive Failures (r = -.931, p < .001) and lower Perceived Stress (r = -.920, p < .001). However, Negative Relationship Quality correlated significantly positively with Cognitive Failures (r = .925, p < .001) and Perceived Stress (r = .905, p < .001), indicating that a higher level of relationship conflict was related to an increased level of cognitive failures and perceived stress.

There was also a high correlation between Cognitive Failures and Perceived Stress scores (r = .927, p < .001) suggesting that these are strongly related. There was no evidence of relationships between any demographic variables (age, duration of marriage, duration of employment) and any of the outcome variables, so they were not considered as a confounder in the relationships of interest.

Regression Analyses

The relationship between relationship quality (positive and negative) and cognitive failures and perceived stress was explored using two separate multiple regression analyses. Demographic variables were not used as covariates since they were not correlated with the outcome variables.

Predicting Cognitive Failures

Table 3: Summary of Multiple Regression Analysis Predicting Cognitive Failures (N = 300)

Predictor	B	SE	B	t	p
(Constant)	40.162	4.013		10.009	< .001
Positive RQ	-.606	.090	-.556	-6.701	< .001
Negative RQ	.465	.100	.386	4.651	< .001

Note: RQ = Relationship Quality. R^2 = .875, Adjusted R^2 = .874, F(2, 297) = 1040.68, p < .001.

This was done using multiple regression analysis, with Positive Relationship Quality and Negative Relationship Quality as predictors and Cognitive Failures as the dependent variable. The overall model was significant, F(2, 297) = 1040.68, p < .001, explaining 87.5% of the variance in cognitive failures (R^2 = .875, Adjusted R^2 = .874).

The contribution of both the predictors was significant. Positive Relationship Quality was a significant negative predictor (β = -.556, t = -6.70, p < .001), meaning that the higher scores of positive relationship quality, the fewer number of cognitive failures. Negative Relationship Quality proved to be a significant positive predictor (β = .386, t = 4.65, p < .001) of more cognitive failures, meaning that higher negative relationship quality indicated

more cognitive failures. Table 3 shows the regression coefficients.

Predicting Perceived Stress

Table 4: Summary of Multiple Regression Analysis Predicting Perceived Stress (N = 300)

Predictor	B	SE	B	t	p
(Constant)	31.677	3.156		10.038	< .001
Positive RQ	-.540	.071	-.693	-7.596	< .001
Negative RQ	.201	.079	.233	2.556	.011

Note: RQ = Relationship Quality. R^2 = .849, Adjusted R^2 = .848, F(2, 297) = 835.17, p < .001.

A second multiple regression analysis was done, having Positive Relationship Quality, as well as Negative Relationship Quality, as predictors and Perceived Stress as the dependent variable. The overall model was significant, F(2, 297) = 835.17, p < .001, explaining 84.9% of the variance in perceived stress (R^2 = .849, Adjusted R^2 = .848).

The model was significant for both two predictors. Positive Relationship Quality was the best predictor (β = -.693, t = -7.60, p < .001), meaning that higher Positive Relationship Quality scores were significantly associated with lower perceived stress. Negative Relationship Quality also was a significant positive predictor (β = .233, t = 2.56, p = .011), such that more relationship conflict was associated with more stress, although less so than positive relationship quality. The regression coefficients are given in Table 4.

Summary of Regression Findings

For both the cognitive failures and perceived stress, the regression models accounted for a substantial amount of variance and were highly significant. Positive Relationship Quality proved to be a more useful predictor of both outcomes, especially perceived stress (beta = -.693) than for cognitive failures (beta = -.556). In contrast,Negative Relationship Quality had a larger impact on higher order processes of cognitive failures (β = .386) versus perceived stress (β = .233).

The results indicated that the positive aspects of relationship quality (warmth, support, intimacy) are more influential in reducing cognitive failures and perceived stress for married women whose partners have migrated overseas, and that the negative aspects (conflict, criticism) are less, but still significantly, influential to increase levels of perceived stress when negative.

Discussion

The current study focused on relationship quality (positive and negative aspects) as predicting cognitive failures and perceived stress levels in married women whose husbands worked overseas. All five hypotheses were supported by the findings and indicated that the quality of the relationship is an important factor in differences in cognition and emotion in this unique population.

Results indicate that positive relationship quality negatively related to cognitive failures, and negative relationship quality positively related to both cognitive failures and perceived stress. Such findings would conform to the stress process model that views the relationship quality as an either protective or chronic stressful factor (Pearlin et al., 1981). Examining how positive and negative relationship qualities separately affect outcomes, the bidimensional approach which the PN-RQ scale (Rogge et al., 2017) allowed the finding that positive qualities were a particularly important protective factor.

Relationship Quality and Cognitive Failures: As expected, positive relationship quality negatively predicted cognitive failures (β = -.556), which is supported by previous studies that have found that supportive relationships help safeguard cognitive

resources (Li et al., 2026). Aligned with these findings, women who reported higher levels of warmth, support and intimacy in their marriages had lower everyday cognitive failures. This indicates that positive quality relationships is a protective factor against the cognitive load in coping with the role of a single household manager in absence of a spouse.

Positive relationship quality, on the other hand, predicted less cognitive failures (β = .386), in line with other work revealing that relationship conflict leads to cognitive depletion and a bigger mind wandering (Smallwood & Schooler, 2006). The greater the amount of conflict, criticism, and tensions women experience, the more often they reported that they made cognitive failures, consistent with the stress process model which posits that stressors diminish cognitive resources (Pearlin et al., 1981).

High levels of positive relationship quality versus negative relationship quality also seemed to have a greater impact on cognitive failures, indicating that it may be the presence of positive qualities rather than the absence of negative qualities that are most important in preserving cognitive functioning. The result aligns with research showing that the protective aspects of the relationship qualities are unique for cognition health. Liao and Scholes (2017) reported that increased positive social support levels were linked to better cognitive functioning and memory decline slowed; between-persons and within-person increases in positive social support resulted in independent effects on memory decline. These findings are consistent with a view of the unique protective benefits of positive relationship qualities over and above the absence of negative qualities.

Relationship Quality and Perceived Stress: Positive relationship quality had the largest impact of perceived stress (β = -.693) and accounted for a large proportion of variance. This indicates that relationship quality, emotional connection, support and intimacy may be key stressors and coping tools. These positive attributes can buffer the emotional absence of husbands working overseas and can provide emotional stability and sense of connection for them (Zheng & Yan, 2025).

There was also a significant prediction of the negative relationship quality and perceived stress (β = .233); however, the value was rather small. This seems compatible with research that shows conflict and tension are factors at play in stress though the actual day-to-day stress of having to deal with a partner is reduced when not co-habiting (Straiton et al., 2019, Zheng & Yan, 2025). Negative relationship qualities might have less impact in the absence of everyday intimate relationships but positive ones communicated over the phone become more salient.

Positive Versus Negative Relationship Quality: Not only that being reported, there are differential predictive effects (positive RQ is more predictive in both outcomes), supporting the bidimensional conceptualization of relationship quality (Rogge et al., 2017). Positive and negative qualities are correlated, but treatable as separate with differential predictive validity. Positive relationship quality was the most robust predictor for this population, especially for perceived stress. This can be an expression of the particular scenarios in transnational marriages, where maintaining a positive emotional connection is significant from a distance can be particularly important for psychological health (Kutor & Arku, 2025; Kurmi, 2026).

Literature on left-behind wives in cross-border marriages has observed the dual impacts of marriages, both positive and negative, including physical, emotional, and moral support that helps them adjust and the presence of conflicts and stresses from their husbands, respectively (Kutor & Arku, 2025, Manandhar et al., 2023). In their case, the present study contributes by extending these findings by showing they also affect cognitive functioning.

Cognitive Failures and Perceived Stress: The high positive correlation between cognitive failures and perceived stress (r = .927) was in line with the findings of previous studies attesting to the bi-directional relation between stress and cognition (Broadbent et al., 1982; Guevarra et al., 2024). Stress uses cognitive resources, thus causing more cognitive failures, and cognitive failures create stress, which in turn impair functioning. To date,

daily diary studies have supported that influence of negative affective experiences on cognitive lapses, with negative affect always showing a positive association betweenwithin- and between-person levels (Guevarra et al., 2024). This can be especially true when young women head up households, and constantly have to be focused across several areas.

Theoretical and Practical Implications

The findings add to the stress process model (Pearlin et al., 1981), in that they show how quality of relationship can function as a stressor as well as stress buffer in transnational marriages. Too distant separations because of sending generative or primary labourers to work abroad act as a contextual stressor which unlocks the relationship between relationship quality and cognitive and emotional effects. The findings further confirm the two-dimensional view of the relationship quality (Rogge et al., 2017), and expand the extent to which this can be applied to this population. The unique and differing effects of positive and negative qualities further highlight the value of distinct measurements of each dimension and results of unidimensional measures might fail to reflect these variations. In addition, the significant correlation between the cognitive failures and the perceived stress will drive an empirical assert of the bidirectional nature of stress and cognition (Smallwood & Schooler, 2006).

At a pragmatic level, the results indicate the need for mental health professionals to consider positive and negative relational qualities with women who have husbands who migrated overseas. Intervention efforts that emphasize the improvement of positive relationship quality, such as fostering good communication, emotional bonding, and feeling supported in different locations may be most effective (Straiton et al., 2019; Kutor & Arku, 2025). Relationship strengthening should be incorporated in to the multi-components of mental health promotion in support programs for transnational families, since whilst couples manage to maintain emotional bonds despite distance, there may be a decrease in stress and an improvement in their cognitive functioning. Policies to facilitate family reunification or provide supports to maintain family connections may have large effects on mental health because overseas work is often economically-motivated.

Limitations and Future Directions

It contains some caveats. Since there is no longitudinal study, causal inferences cannot be made since the design was a cross-section study. It would be interesting to investigate in future studies whether it is change in relationship quality that precedes the change in cognitive failures as well as change in perceived stress.

Since data was obtained mainly by self-report measures, common method bias is a minor concern, given the high reliability of all scales used. In future research, partner-report or objective cognitive functioning measures could be added.

This sample only included women whose husbands work overseas; results may not apply to other groups and/or men in the same situation. Future studies might want to consider these factors in other target populations and look for moderating factors like how often the couple communicates, how long the separation has been, and cultural factors.

Conclusion

The findings of the present study clearly suggest that the quality of the relationship is a strong predictor of cognitive failures and perceived stress in married females whose husbands leave the country for work purposes. The qualities of relationships were found to predict outcomes both on their own: the positive characteristics were stronger predictors. The results indicate that positive relationship quality should be supported as a resource to improve protection of cognitive and emotional wellbeing in the transnational marriage context.

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