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Effectiveness of Counselling in Reducing Perceived Stress among Menopausal Women: A Pre–Post Intervention Study

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Abstract

Menopause is a significant biopsychosocial transition characterized by hormonal, psychological, and social changes that may increase vulnerability to perceived stress and emotional distress. Although the physical symptoms of menopause have received considerable attention, the psychological challenges experienced during this stage often remain under-addressed. Counselling has emerged as a promising non-pharmacological intervention for promoting emotional well-being and enhancing coping abilities among menopausal women. The present study examined the effectiveness of counselling in reducing perceived stress among menopausal women using a quantitative pre–post experimental design. A sample of 50 menopausal women aged 45–55 years was selected through convenience sampling. Perceived stress was assessed using the Perceived Stress Scale (PSS-10) before and after a structured counselling intervention comprising stress management strategies, emotional awareness, cognitive restructuring, and coping skill development. Descriptive statistics and paired-sample t-tests were employed to analyze the data. The findings revealed a significant reduction in perceived stress following counselling intervention. Mean stress scores decreased from 25.20 (SD = 4.03) during the pre-test to 20.80 (SD = 5.47) during the post-test, indicating an average reduction of 4.40 points. The paired-sample t-test demonstrated a statistically significant improvement in stress outcomes, $t(49) = 8.26$, $p < .001$, with a large effect size ($d = 1.17$). Furthermore, the proportion of participants classified in the high-stress category decreased substantially following intervention. The findings support the effectiveness of counselling as a valuable psychological intervention for stress reduction during menopause and highlight the importance of integrating mental health services into women's

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healthcare programmes. The study contributes to the growing literature on non-pharmacological approaches to promoting psychological well-being among midlife women.

Keywords: Menopause | Counselling Intervention | Perceived Stress | Women's Mental Health | Psychological Well-being | Stress Management |Coping Strategies

I. Introduction

Menopause is a universal biological transition that marks the permanent cessation of menstruation resulting from the decline of ovarian follicular activity. It typically occurs between the ages of 45 and 55 years and represents a significant developmental milestone in a woman's life. Although menopause is a natural physiological process rather than a pathological condition, it is frequently associated with a range of physical, emotional, cognitive, and psychosocial changes that influence overall well-being. The menopausal transition is characterized by fluctuations and eventual reductions in estrogen and progesterone levels, which affect multiple bodily systems, including neuroendocrine functioning, emotional regulation, sleep patterns, and stress responsiveness (Freeman, 2020; Thurston et al., 2021). Consequently, many women experience symptoms such as hot flashes, fatigue, sleep disturbances, irritability, anxiety, mood fluctuations, and increased psychological distress during this period.

In recent decades, menopause has increasingly been recognized as a significant women's mental health concern rather than merely a reproductive milestone. Emerging evidence suggests that hormonal changes during menopause interact with psychological and social factors, creating heightened vulnerability to stress-related outcomes. Neurobiological studies indicate that declining estrogen levels influence neurotransmitter systems associated with mood regulation, including serotonin, dopamine, and gamma-aminobutyric acid (GABA), thereby affecting emotional stability and stress tolerance (Soares, 2021). These physiological changes may contribute to increased sensitivity to environmental stressors and reduced coping capacity among menopausal women.

The experience of menopause extends beyond biological changes and is deeply influenced by psychosocial circumstances. Women in midlife often navigate multiple social roles simultaneously, including professional responsibilities, caregiving obligations, marital adjustments, aging-related concerns, and family transitions. Such demands frequently coincide with the menopausal transition, creating cumulative stress that may negatively affect psychological well-being. Research has shown that women experiencing menopause often report elevated levels of perceived stress, emotional exhaustion, and psychological burden compared to earlier life stages (Avis et al., 2023). These stressors may be further intensified in societies where menopause remains insufficiently discussed, misunderstood, or stigmatized.

Within the Indian sociocultural context, menopause presents unique psychological challenges. Cultural expectations surrounding gender roles, caregiving responsibilities, and family obligations may limit opportunities for emotional expression and help-seeking behavior. Many women continue to prioritize familial needs over personal well-being, often neglecting their psychological health during menopause. Additionally, awareness regarding menopause-related mental health concerns remains relatively limited in many communities, resulting in underutilization of psychological support services. Consequently, stress experienced during

menopause may remain unrecognized and inadequately addressed, increasing the risk of prolonged psychological distress and diminished quality of life (Patel et al., 2022).

Stress has been widely recognized as one of the most significant psychological outcomes associated with menopausal transition. According to the transactional model of stress proposed by Lazarus and Folkman (1984), stress occurs when individuals perceive environmental demands as exceeding their available coping resources. This conceptualization emphasizes cognitive appraisal processes, suggesting that stress is not solely determined by external events but by how individuals interpret and respond to those events. During menopause, hormonal fluctuations, physical symptoms, and psychosocial demands may collectively influence cognitive appraisal, thereby increasing perceptions of stress and reducing adaptive coping capacity.

Perceived stress refers to the degree to which individuals evaluate situations in their lives as unpredictable, uncontrollable, or overwhelming (Cohen et al., 1983). Unlike objective stressors, perceived stress focuses on subjective experiences and personal interpretations of life events. This construct has gained substantial attention in health psychology because perceptions of stress are often stronger predictors of psychological and physical health outcomes than objective stress exposure alone. Elevated perceived stress has been associated with anxiety, depression, sleep disturbances, impaired immune functioning, cardiovascular risk, reduced quality of life, and poorer emotional well-being (Cohen et al., 2019). Research conducted over the past decade has consistently demonstrated that menopausal women report higher levels of perceived stress than many other adult populations. Studies indicate that vasomotor symptoms, sleep disruptions, mood instability, occupational pressures, caregiving responsibilities, and concerns regarding aging contribute significantly to stress experiences during menopause (Mishra & Kuh, 2022). Furthermore, stress may exacerbate menopausal symptoms, creating a reciprocal relationship in which psychological distress and physiological symptoms reinforce one another. This cyclical interaction highlights the importance of addressing stress as a central component of menopausal healthcare.

Traditionally, menopause management has focused primarily on biomedical interventions aimed at alleviating physical symptoms. Hormone replacement therapy, pharmacological treatments, and symptom-specific medical interventions have been extensively utilized to address vasomotor symptoms and physiological discomfort. While these approaches may provide relief from physical manifestations of menopause, they often fail to adequately address emotional and psychological challenges. Consequently, growing attention has been directed toward non-pharmacological interventions that promote holistic well-being and psychological resilience among menopausal women (World Health Organization [WHO], 2022).

Among such interventions, counselling has emerged as a promising psychological strategy for stress management and emotional support. Counselling provides a structured and supportive environment in which individuals can explore emotional experiences, identify maladaptive thought patterns, develop coping mechanisms, and enhance self-awareness. Through guided reflection and therapeutic interaction, counselling facilitates psychological adjustment, emotional regulation, and resilience development. Contemporary counselling approaches increasingly emphasize empowerment, adaptive coping, cognitive restructuring, and strengths-based interventions, all of which may be particularly beneficial during menopause.

The effectiveness of counselling in reducing psychological distress has been well documented across diverse populations. Cognitive-behavioral interventions, supportive counselling, psychoeducation, and stress-management programmes have demonstrated significant effectiveness in reducing stress, anxiety, and depressive symptoms while improving overall

psychological functioning (Cuijpers et al., 2023). Counselling interventions may be particularly relevant for menopausal women because they address both emotional experiences and cognitive interpretations of menopausal changes. By helping women understand menopause as a normal developmental transition rather than a crisis, counselling may reduce distress and enhance adaptive coping.

Recent literature has increasingly highlighted the importance of psychological interventions in menopause care. Studies conducted between 2020 and 2025 suggest that structured counselling programmes can improve emotional well-being, reduce stress perception, enhance self-efficacy, and strengthen coping skills among midlife women (Green & Santoro, 2023; Thurston et al., 2021). Interventions involving psychoeducation, relaxation training, mindfulness-based approaches, and cognitive-behavioral strategies have shown encouraging outcomes in reducing menopause-related psychological symptoms. However, despite these advances, counselling remains underrepresented within routine menopausal healthcare services in many regions.
The growing emphasis on holistic healthcare further underscores the need for psychological interventions during menopause. The biopsychosocial model proposed by Engel (1977) provides an important framework for understanding menopause-related stress. According to this model, health outcomes result from the interaction of biological, psychological, and social factors. Menopause exemplifies this interaction because hormonal changes, emotional experiences, and social circumstances collectively shape women's well-being. Within this framework, counselling functions as a psychosocial intervention capable of influencing emotional responses, cognitive appraisal processes, and coping behaviors, thereby contributing to improved health outcomes.

Another theoretical foundation relevant to the present study is the Stress and Coping Theory developed by Lazarus and Folkman (1984). This theory proposes that individuals continuously evaluate environmental demands and available coping resources. Psychological distress emerges when perceived demands exceed coping capacity. Counselling interventions may influence both appraisal processes and coping strategies by helping individuals reinterpret stressors, develop adaptive responses, and strengthen emotional resilience. Consequently, counselling may reduce perceived stress not only by addressing external challenges but also by transforming individuals' perceptions and coping mechanisms.

Although growing evidence supports the psychological benefits of counselling, several research gaps remain. A substantial proportion of menopause-related studies continue to emphasize physiological symptoms while giving comparatively limited attention to psychological outcomes. Existing research frequently focuses on anxiety, depression, or quality of life rather than perceived stress as a distinct construct. Furthermore, many studies utilize cross-sectional designs that limit causal interpretation of intervention effectiveness. Structured pre–post intervention studies examining counselling outcomes among menopausal women remain relatively limited, particularly within the Indian context.

The scarcity of Indian research is especially noteworthy because sociocultural factors may significantly influence menopausal experiences. Cultural beliefs, family dynamics, social expectations, healthcare accessibility, and stigma surrounding mental health may shape how women perceive and cope with menopause-related challenges. Therefore, findings derived from Western populations may not fully capture the experiences of Indian women. Empirical investigations conducted within Indian settings are necessary to develop culturally relevant interventions and evidence-based mental health strategies.

Additionally, existing literature indicates a need for greater integration between theoretical frameworks and empirical intervention research. While the biopsychosocial model and stress-

coping theories provide strong conceptual foundations, their application in intervention studies involving menopausal women remains relatively limited. Research examining counselling effectiveness through these theoretical perspectives may contribute to both academic understanding and practical application in counselling psychology.

Given these considerations, the present study seeks to examine the effectiveness of counselling in reducing perceived stress among menopausal women using a quantitative pre–post experimental design. By assessing stress levels before and after counselling intervention, the study aims to generate empirical evidence regarding the role of counselling in promoting psychological well-being during menopause. The investigation is expected to contribute to the growing body of literature on women's mental health, counselling psychology, and non-pharmacological approaches to stress management.

The significance of the present study extends beyond academic inquiry. Findings may provide practical guidance for counsellors, psychologists, healthcare professionals, and policymakers seeking to develop integrated approaches to menopausal care. By demonstrating the potential benefits of counselling interventions, the study may support the inclusion of psychological services within women's healthcare programmes and encourage greater recognition of mental health needs during menopause. Furthermore, the findings may contribute to reducing stigma surrounding psychological support and promote awareness regarding the importance of emotional well-being among midlife women.

In summary, menopause represents a complex biopsychosocial transition that can substantially influence perceived stress and psychological functioning. Counselling offers a promising avenue for addressing the emotional and cognitive challenges associated with this life stage. Despite increasing recognition of menopause-related mental health concerns, empirical evidence regarding counselling effectiveness remains limited, particularly within the Indian context. The present study therefore addresses an important research gap by examining whether structured counselling intervention can significantly reduce perceived stress among menopausal women and contribute to improved psychological well-being.

II. Literature Review

Menopause and Psychological Well-Being

Menopause is a multidimensional life transition involving biological, psychological, and social changes that influence women's overall health and well-being. While the cessation of menstruation represents the most visible marker of menopause, the transition encompasses a broader range of physiological and emotional experiences. Contemporary research emphasizes that menopause should be understood as a biopsychosocial phenomenon rather than solely a reproductive event, given its substantial impact on psychological functioning, quality of life, and mental health outcomes (Thurston et al., 2021).

The menopausal transition is characterized by declining ovarian function and reduced production of estrogen and progesterone. These hormonal changes affect numerous physiological systems, including the central nervous system. Estrogen plays a significant role in regulating neurotransmitters such as serotonin, dopamine, and norepinephrine, all of which contribute to mood stability and emotional regulation. Consequently, fluctuations in hormonal levels during menopause may increase susceptibility to mood disturbances, irritability, anxiety, and perceived stress (Freeman, 2020; Soares, 2021).

Recent studies indicate that psychological symptoms are among the most frequently reported concerns during menopause. Women commonly experience emotional instability, reduced self-confidence, increased sensitivity to stressors, and concerns regarding aging and health. Avis et al. (2023) reported that psychological symptoms often coexist with

physical manifestations of menopause, creating a cumulative burden that negatively influences quality of life. Similarly, Mishra and Kuh (2022) found that women experiencing severe menopausal symptoms frequently report elevated levels of emotional distress and reduced psychological well-being.

Psychological responses to menopause are also influenced by sociocultural and contextual factors. Women's perceptions of menopause vary across cultures, educational backgrounds, family structures, and healthcare environments. Positive attitudes toward menopause have been associated with better emotional adjustment, whereas negative perceptions are linked to higher levels of stress and psychological distress (Green & Santoro, 2023). Consequently, psychological outcomes during menopause cannot be fully explained by biological factors alone but must be understood within broader social and cultural contexts.

Perceived Stress among Menopausal Women

Stress is one of the most commonly reported psychological concerns during menopause. According to Lazarus and Folkman's (1984) transactional model, stress arises when individuals perceive that environmental demands exceed their available coping resources. This conceptualization highlights the subjective nature of stress and underscores the importance of cognitive appraisal in determining emotional responses.

Perceived stress refers to an individual's evaluation of life circumstances as unpredictable, uncontrollable, or overwhelming (Cohen et al., 1983). It represents a psychological construct that captures subjective experiences rather than objective stress exposure. Research has consistently demonstrated that perceived stress is a strong predictor of both psychological and physical health outcomes, including depression, anxiety, cardiovascular risk, sleep disturbances, and reduced immune functioning (Cohen et al., 2019).

Menopausal women often experience elevated levels of perceived stress due to the simultaneous presence of biological changes and psychosocial challenges. Midlife women frequently face multiple responsibilities, including employment demands, caregiving roles, marital adjustments, financial obligations, and health-related concerns. These challenges often coincide with menopausal symptoms, increasing vulnerability to psychological distress (Patel et al., 2022).

A systematic review by Geukes et al. (2024) found that perceived stress was significantly associated with the severity of menopausal symptoms, particularly sleep disturbances, emotional instability, and vasomotor symptoms. Women reporting higher stress levels also exhibited lower levels of psychological resilience and poorer coping outcomes. Similarly, Thurston and Joffe (2021) observed that stress may exacerbate menopausal symptoms, creating a reciprocal relationship in which physiological discomfort and psychological distress reinforce one another.

Within the Indian context, perceived stress among menopausal women has gained increasing attention in recent years. Studies conducted across different regions of India have reported moderate to high levels of stress among menopausal women, often associated with family responsibilities, social expectations, and limited awareness regarding menopause-related mental health concerns (Sharma et al., 2023). These findings highlight the importance of interventions that address both emotional and contextual sources of stress.

Theoretical Perspectives on Stress and Coping

The present study is primarily grounded in the Stress and Coping Theory developed by Lazarus and Folkman (1984). According to this theory, individuals continuously evaluate environmental situations through two appraisal processes: primary appraisal and secondary appraisal.

Primary appraisal involves assessing whether a situation is threatening, harmful, or challenging. Secondary appraisal focuses on evaluating

available coping resources and potential responses. Stress occurs when perceived demands exceed perceived coping capabilities.

This framework is particularly relevant to menopausal women because menopause involves numerous physiological and psychosocial changes that require adaptation. Women who perceive menopausal challenges as overwhelming may experience higher levels of stress, whereas those with stronger coping resources may demonstrate greater resilience.

Contemporary studies continue to support the applicability of the transactional model in understanding menopause-related psychological outcomes. Research suggests that adaptive coping strategies are associated with lower stress levels, better emotional regulation, and improved psychological well-being among menopausal women (Bromberger et al., 2023). Conversely, maladaptive coping mechanisms such as avoidance, denial, and rumination are associated with greater psychological distress.

The Stress and Coping Theory also provides a strong rationale for counselling interventions. Counselling aims to modify cognitive appraisal processes, enhance coping resources, and improve emotional regulation. Through these mechanisms, counselling may reduce perceived stress and promote psychological adaptation during menopause.

The Biopsychosocial Model and Menopause

The Biopsychosocial Model proposed by Engel (1977) remains one of the most influential frameworks for understanding health and illness. The model argues that health outcomes result from the interaction of biological, psychological, and social factors rather than biological processes alone.

In the context of menopause, biological factors include hormonal fluctuations and physiological symptoms. Psychological factors encompass stress perception, emotional responses, self-efficacy, and coping mechanisms. Social factors involve family relationships, occupational demands, cultural beliefs, and support systems.

Recent menopause research increasingly adopts a biopsychosocial perspective. The World Health Organization (2022) emphasizes that mental health outcomes are influenced by complex interactions among biological, psychological, and environmental determinants. Similarly, contemporary women's health research recognizes that successful adaptation to menopause depends not only on symptom management but also on emotional resilience and social support (Green & Santoro, 2023).

The biopsychosocial model provides a valuable conceptual foundation for counselling interventions because counselling primarily targets psychological and social dimensions of health. By helping women reinterpret menopausal experiences, strengthen coping resources, and access social support, counselling contributes to holistic well-being and improved adaptation.

Counselling as a Psychological Intervention

Counselling is widely recognized as an effective psychological intervention for promoting emotional well-being, stress management, and adaptive coping. Contemporary counselling approaches emphasize collaborative problem-solving, emotional exploration, cognitive restructuring, and strengths-based development.

According to Corey (2021), counselling facilitates self-awareness and empowers individuals to develop healthier responses to challenging life circumstances. Counselling interventions may incorporate cognitive-behavioral, humanistic, supportive, psychoeducational, and integrative techniques depending on individual needs and presenting concerns.

The effectiveness of counselling for stress reduction has been extensively documented across diverse populations. A meta-analysis by Cuijpers et al. (2023) reported that psychological interventions consistently produce significant reductions in stress, anxiety, and depressive

symptoms while improving overall psychological functioning. These findings suggest that counselling can serve as an effective non-pharmacological approach to mental health promotion.

For menopausal women, counselling offers several specific benefits. It provides a supportive environment for discussing emotional experiences, normalizes menopausal challenges, enhances coping strategies, and promotes adaptive adjustment. Counselling may also help women challenge negative beliefs about aging and menopause, thereby reducing psychological distress and improving self-perception.

Recent studies indicate that counselling interventions can positively influence emotional regulation, resilience, self-esteem, and stress management among midlife women (Maki et al., 2022). These outcomes are particularly relevant because many menopausal women experience difficulties adapting to changing roles, bodily changes, and life transitions.

Cognitive-Behavioral Approaches to Stress Reduction

Among various counselling approaches, Cognitive Behavioral Therapy (CBT) has received substantial empirical support for stress management and emotional regulation. CBT is based on the premise that emotional distress is influenced by maladaptive thought patterns and dysfunctional beliefs. By identifying and modifying these cognitive distortions, individuals can develop healthier emotional and behavioral responses.

Research consistently demonstrates the effectiveness of CBT-based interventions in reducing stress and psychological symptoms among menopausal women. Hunter et al. (2022) reported that CBT interventions significantly reduced stress, anxiety, and menopausal symptom distress while improving quality of life. Similar findings were reported by Ayers et al. (2023), who observed sustained psychological benefits following structured cognitive-behavioral counselling programs.

CBT-based counselling is particularly relevant to menopause because it addresses cognitive appraisals that contribute to stress. Women who interpret menopausal symptoms as threatening or uncontrollable may experience heightened distress. Counselling helps individuals reframe these perceptions and develop more adaptive coping strategies, thereby reducing perceived stress.

Emotional Regulation and Resilience in Menopause

Emotional regulation refers to the ability to monitor, evaluate, and modify emotional responses in ways that facilitate adaptation and well-being. Effective emotional regulation is associated with lower stress levels, better interpersonal functioning, and improved mental health outcomes.

Menopausal transition may challenge emotional regulation due to hormonal fluctuations and increased psychosocial demands. Research suggests that women with stronger emotional regulation skills report lower levels of stress and greater psychological resilience during menopause (Gross, 2022).

Resilience, defined as the ability to adapt positively in the face of adversity, has emerged as an important protective factor during menopause. Recent studies indicate that resilience mediates the relationship between menopausal symptoms and psychological well-being (Bromberger et al., 2023). Women with higher resilience levels demonstrate greater adaptability, lower perceived stress, and better overall mental health.

Counselling interventions contribute to resilience development by fostering self-awareness, problem-solving skills, emotional regulation, and adaptive coping. Consequently, counselling may reduce perceived stress not only directly but also indirectly through resilience enhancement.

Research Gap

Despite increasing recognition of menopause-related mental health concerns, several important gaps remain in the existing literature.

First, a substantial proportion of menopause research continues to focus primarily on physiological symptoms, while psychological interventions receive comparatively less attention. Second, studies examining counselling effectiveness often emphasize anxiety, depression, or quality of life rather than perceived stress as a distinct psychological construct. Third, many investigations employ cross-sectional methodologies that limit causal interpretation of intervention outcomes.

Furthermore, empirical studies examining counselling as a structured intervention among menopausal women remain limited, particularly within the Indian context. Cultural factors, family dynamics, social expectations, and healthcare accessibility may significantly influence psychological experiences during menopause, yet these contextual considerations remain underrepresented in existing research.

Finally, there is limited integration between theoretical frameworks such as the Biopsychosocial Model and Stress and Coping Theory and empirical counselling intervention studies. This gap highlights the need for research that simultaneously addresses theoretical understanding and practical intervention effectiveness.

Accordingly, the present study seeks to address these limitations by examining the effectiveness of counselling in reducing perceived stress among menopausal women using a structured pre–post experimental design. The findings are expected to contribute to both counselling psychology literature and women's mental health research while providing evidence for the integration of psychological services into menopausal healthcare programs.

III. Method

Theoretical Framework

The present study is grounded in two complementary theoretical perspectives: the Biopsychosocial Model (Engel, 1977) and the Stress and Coping Theory (Lazarus & Folkman, 1984). Together, these frameworks provide a comprehensive understanding of how menopausal women experience stress and how counselling interventions may facilitate psychological adaptation and stress reduction.

The Biopsychosocial Model

The Biopsychosocial Model proposed by Engel (1977) revolutionized healthcare by emphasizing that health outcomes are shaped by the interaction of biological, psychological, and social factors. Unlike traditional biomedical models that focus exclusively on physiological processes, the biopsychosocial approach recognizes the complex interplay between bodily changes, cognitive processes, emotional experiences, and environmental influences.

Menopause represents an ideal context for applying the biopsychosocial model because it involves simultaneous biological, psychological, and social transitions. Biologically, menopause is characterized by declining estrogen and progesterone levels, which influence neuroendocrine functioning, mood regulation, sleep quality, and stress responsiveness (Freeman, 2020). These hormonal changes contribute to symptoms such as vasomotor disturbances, fatigue, cognitive difficulties, and emotional fluctuations.

Psychologically, menopause may influence self-perception, emotional stability, stress appraisal, and coping effectiveness. Women often encounter concerns related to aging, health, changing physical appearance, and shifting family roles. Such experiences may increase vulnerability to perceived stress, anxiety, and emotional distress (Thurston et al., 2021).

Social factors further shape menopausal experiences. Family responsibilities, caregiving

obligations, occupational demands, social support systems, cultural expectations, and societal attitudes toward aging significantly influence how women adapt to menopause. Research suggests that strong social support networks are associated with lower stress levels and improved psychological outcomes during menopause (Green & Santoro, 2023).

Within the biopsychosocial framework, counselling functions as a psychosocial intervention that directly targets psychological and social dimensions of health. By enhancing emotional awareness, promoting adaptive coping, strengthening social support utilization, and facilitating cognitive restructuring, counselling may improve women's capacity to manage menopausal stress and maintain psychological well-being.

Stress and Coping Theory

The Stress and Coping Theory developed by Lazarus and Folkman (1984) provides the primary explanatory framework for understanding perceived stress within the present study. According to this theory, stress is not determined solely by external events but emerges from an individual's cognitive appraisal of environmental demands and available coping resources.

The theory proposes two major appraisal processes:

Primary Appraisal

During primary appraisal, individuals evaluate whether a situation is threatening, challenging, harmful, or benign. Menopausal women may perceive physical symptoms, emotional changes, or life transitions as stressful depending on their personal interpretations and beliefs.

Secondary Appraisal

Secondary appraisal involves evaluating available resources and coping capabilities. Individuals assess whether they possess sufficient psychological, emotional, social, or practical resources to manage identified stressors.

Stress occurs when perceived demands exceed perceived coping resources. Consequently, two women experiencing similar menopausal symptoms may report substantially different stress levels depending on their cognitive appraisals and coping abilities.

The theory further distinguishes between problem-focused coping and emotion-focused coping. Problem-focused coping aims to address stressors directly, whereas emotion-focused coping seeks to regulate emotional responses. Effective adaptation typically involves a flexible combination of both coping strategies.

Counselling interventions are particularly relevant within this framework because they influence both appraisal processes and coping mechanisms. Through therapeutic guidance, women may develop more adaptive interpretations of menopausal experiences, strengthen coping resources, and enhance emotional regulation. As a result, perceived stress levels may decrease even when external circumstances remain unchanged.

Conceptual Framework of the Study

The conceptual framework of the present study proposes that counselling intervention serves as the independent variable influencing perceived stress among menopausal women.

Independent Variable

Counselling Intervention

The intervention consisted of structured counselling sessions focusing on:

- Emotional awareness
- Stress management strategies
- Cognitive restructuring
- Coping skill enhancement
- Psychoeducation regarding menopause
- Adaptive problem-solving

Dependent Variable

Perceived Stress

Perceived stress represents participants' subjective appraisal of life situations as stressful,

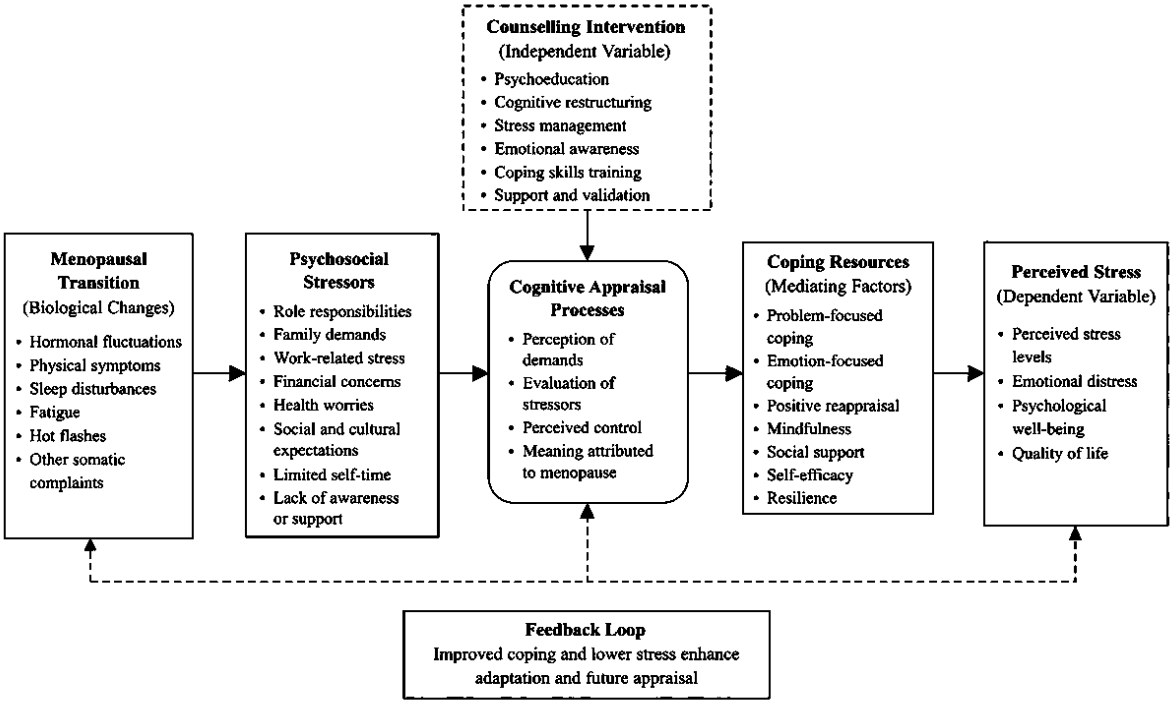
uncontrollable, or overwhelming, measured using the Perceived Stress Scale (PSS-10) developed by Cohen et al. (1983).

Expected Relationship

The framework assumes that counselling intervention enhances coping resources, improves cognitive appraisal processes, and promotes emotional regulation, thereby reducing perceived stress among menopausal women.

The present study is guided by a conceptual framework derived from the Biopsychosocial Model and the Stress and Coping Theory. The framework proposes that counselling intervention enhances emotional awareness, coping skills, and cognitive appraisal processes, which subsequently contribute to reductions in perceived stress among menopausal women. Figure 1 presents the conceptual framework underlying the study.

Figure 1. *Conceptual Framework of the Study*



Note. The conceptual framework illustrates the theoretical relationship between counselling intervention and perceived stress among menopausal women. The framework is grounded in the Biopsychosocial Model (Engel, 1977) and the Stress and Coping Theory (Lazarus & Folkman, 1984). Counselling intervention is proposed to influence cognitive appraisal processes and coping resources, leading to reduced perceived stress and improved psychological adjustment during menopause.

Need for the Present Study

Although menopause is increasingly recognized as a significant women's mental health concern, available healthcare services continue to focus predominantly on physiological symptom management. Psychological challenges such as perceived stress, emotional distress, anxiety, and coping difficulties often remain under-addressed. Recent evidence suggests that psychological interventions may significantly improve mental health outcomes among menopausal women (Ayers et al., 2023; Green & Santoro, 2023). However, several limitations remain within the existing literature.

First, many studies focus on symptom prevalence rather than intervention effectiveness. Second, structured pre–post counselling studies remain relatively limited. Third, relatively few investigations have been conducted within Indian populations, despite substantial sociocultural influences on menopausal experiences. Finally,

perceived stress has received less attention than related outcomes such as anxiety and depression. These limitations highlight the need for empirical research examining whether counselling can effectively reduce perceived stress among menopausal women within the Indian context.

Objectives of the Study

The present study was conducted with the following objectives:

1. To assess the level of perceived stress among menopausal women prior to counselling intervention.
2. To evaluate the effectiveness of counselling in reducing perceived stress among menopausal women.
3. To compare perceived stress levels before and after counselling intervention.
4. To examine the role of counselling in enhancing coping capacity and psychological adjustment among menopausal women.

Hypotheses

Based on the theoretical foundations and existing literature, the following hypotheses were formulated:

Null Hypotheses

H_{01}: There is no significant difference in perceived stress levels among menopausal women before and after counselling intervention.

H_{02}: Counselling intervention does not significantly reduce perceived stress among menopausal women.

Research Hypotheses

H_{11}: There is a significant difference in perceived stress levels among menopausal women before and after counselling intervention.

H_{12}: Counselling intervention significantly reduces perceived stress among menopausal women.

Chapter Summary

This chapter presented the theoretical foundations underpinning the present investigation. The Biopsychosocial Model and Stress and Coping Theory provide complementary explanations for menopause-related stress and the potential effectiveness of counselling interventions. Based on these frameworks and existing empirical evidence, a conceptual model was proposed linking counselling intervention with reductions in perceived stress. The chapter also outlined the study objectives and hypotheses that guided the empirical investigation.

IV. Methodology

Research Design

The present study employed a quantitative pre–post experimental research design to examine the effectiveness of counselling in reducing perceived stress among menopausal women. Experimental and quasi-experimental approaches are widely regarded as appropriate methodologies for evaluating intervention outcomes because they facilitate the measurement of change following a specific treatment or programme (Creswell & Creswell, 2018).

A pre–post design was selected because it allows researchers to assess participants at two distinct time points: prior to intervention and following intervention. This approach enables direct comparison of stress levels before and after counselling while controlling for individual differences among participants. Since each participant serves as her own comparison, the design enhances sensitivity in detecting intervention-related changes (Field, 2022).

Within the context of the present study, menopausal women completed the Perceived Stress Scale (PSS-10) before participating in counselling sessions and again after completion of the intervention. The difference between pre-test and post-test scores served as an indicator of counselling effectiveness.

The study adopted a single-group pre–post intervention format, which is commonly utilized in counselling and mental health research when the primary objective is to evaluate intervention outcomes in naturally occurring populations (Kazdin, 2021).

Research Approach

The study followed a quantitative research approach, emphasizing objective measurement and statistical evaluation of perceived stress levels. Quantitative methods enable systematic assessment of intervention effectiveness through numerical data and inferential statistical analysis.

The use of standardized measurement instruments allowed for reliable assessment of stress levels before and after counselling intervention. Quantitative methodology was particularly appropriate because the study aimed to determine whether counselling produced statistically significant reductions in perceived stress among menopausal women.

Population of the Study

The target population consisted of menopausal women aged between 45 and 55 years residing within the study area.

This age range was selected because it corresponds with the typical age at which women experience menopause and associated biopsychosocial changes. Women undergoing menopausal transition frequently encounter hormonal fluctuations, emotional adjustments, changing social roles, and increased vulnerability to psychological distress, making them an appropriate population for investigating stress reduction interventions (Thurston et al., 2021).

Sample and Sampling Technique

Sample Size

The final sample comprised 50 menopausal women who met the eligibility criteria and voluntarily agreed to participate in the study.

Sample sizes ranging from 30 to 100 participants are commonly considered adequate for pre–post intervention studies involving psychological outcomes and paired statistical analyses (Field, 2022). The sample size used in the present investigation was therefore considered sufficient for detecting meaningful changes in perceived stress following counselling intervention.

Sampling Technique

A convenience sampling technique was employed. Convenience sampling involves selecting participants who are accessible, available, and willing to participate in the research. This approach is frequently utilized in counselling and community-based psychological studies where access to specialized populations may be limited (Etikan & Bala, 2017).

The selection of convenience sampling was guided by practical considerations, including accessibility of menopausal women willing to participate in counselling sessions over the intervention period.

Inclusion Criteria

Participants were included in the study if they met the following criteria:

1. Women aged between 45 and 55 years.
2. Women experiencing menopause or post-menopause.
3. Individuals capable of understanding the study instructions.
4. Participants willing to provide informed consent.
5. Individuals available to attend the counselling sessions and complete both assessments.

Exclusion Criteria

Participants were excluded if they:

1. Were currently receiving psychotherapy or structured counselling.
2. Were undergoing psychiatric treatment for severe mental health conditions.
3. Reported severe neurological or cognitive impairments.
4. Were unable to complete the counselling intervention.
5. Declined informed consent.

These criteria were established to ensure that observed changes could reasonably be attributed to the counselling intervention rather than

concurrent psychological treatments or severe clinical conditions.

Research Instrument

Perceived Stress Scale (PSS-10)

Perceived stress was measured using the Perceived Stress Scale (PSS-10) developed by Cohen, Kamarck, and Mermelstein (1983).

The PSS-10 is among the most widely used psychological instruments for assessing perceived stress across diverse populations and cultural contexts. The scale measures the extent to which individuals perceive situations in their lives as stressful, uncontrollable, and overwhelming.

Structure of the Scale

The PSS-10 consists of ten items designed to assess stress experiences during the previous month.

Participants respond using a five-point Likert scale:

- 0 = Never
- 1 = Almost Never
- 2 = Sometimes
- 3 = Fairly Often
- 4 = Very Often

Reverse-Scored Items

The following items are reverse scored:

- Item 4
- Item 5
- Item 7
- Item 8

Scoring Procedure

Total scores are obtained by summing responses across all ten items after reverse scoring appropriate items.

Possible scores range from 0 to 40, with higher scores indicating greater perceived stress.

Interpretation

Score Range	Stress Level
0–13	Low Stress
14–26	Moderate Stress
27–40	High Stress

Reliability and Validity

The PSS-10 has demonstrated strong psychometric properties across numerous studies. Recent investigations continue to report satisfactory internal consistency coefficients typically ranging between .78 and .91 across adult populations (Taylor, 2021).

The scale has been extensively validated in health psychology, counselling psychology, and women's mental health research, making it appropriate for assessing perceived stress among menopausal women.

Demographic Information Form

A self-developed demographic questionnaire was administered to collect background information regarding participants.

The questionnaire included:

- Age
- Marital status
- Educational qualification
- Occupation
- Duration since menopause

These variables were collected to describe the sample characteristics and facilitate interpretation of findings.

Counselling Intervention

Participants underwent a structured counselling programme conducted over approximately four weeks.

The intervention consisted of four to six counselling sessions, with each session focusing on stress reduction and psychological adaptation during menopause.

Key components included:

Psychoeducation

Participants received information regarding menopause, common emotional experiences, stress responses, and available coping resources.

Emotional Awareness

Counselling sessions encouraged participants to identify, understand, and express emotions associated with menopausal experiences.

Cognitive Restructuring

Participants were guided in recognizing and modifying maladaptive thoughts and beliefs contributing to psychological distress.

Stress Management Techniques

Relaxation exercises, self-monitoring strategies, and stress reduction techniques were introduced.

Coping Skills Enhancement

The intervention emphasized adaptive coping strategies, problem-solving skills, and resilience-building practices.

The counselling programme was designed to promote psychological adjustment and reduce perceived stress through improved emotional regulation and coping capacity.

Data Collection Procedure

Data collection was conducted in a systematic manner.

Initially, eligible participants were identified according to the inclusion and exclusion criteria. The purpose of the study was explained, and informed consent was obtained.

Participants first completed:

1. Demographic Information Form
2. Perceived Stress Scale (Pre-Test)

Following baseline assessment, participants attended the counselling intervention programme.

Upon completion of the intervention, participants again completed the Perceived Stress Scale (Post-Test).

The collected responses were coded and entered into a spreadsheet for statistical analysis.

Ethical Considerations

The study adhered to established ethical principles governing psychological research.

Several measures were implemented to ensure participant welfare:

Voluntary Participation

Participation was entirely voluntary, and no participant was compelled to participate.

Informed Consent

Participants were informed regarding the purpose, procedures, benefits, and voluntary nature of the study before providing consent.

Confidentiality

Participant identities were not disclosed. Data were stored securely and utilized exclusively for academic purposes.

Right to Withdraw

Participants were informed of their right to withdraw from the study at any stage without penalty.

Beneficence

The counselling intervention was designed to promote psychological well-being and minimize any potential discomfort.

The study complied with accepted ethical standards for research involving human participants.

Statistical Analysis

Data were analyzed using descriptive and inferential statistical techniques.

Descriptive Statistics

The following descriptive measures were computed:

- Frequency
- Percentage
- Mean
- Standard Deviation
- Minimum and Maximum Scores

These statistics were used to summarize participant characteristics and perceived stress levels.

Inferential Statistics

To evaluate counselling effectiveness, a paired-sample t-test was performed.

The paired-sample t-test was selected because:

1. The same participants were assessed twice.
2. The study aimed to compare pre-test and post-test scores.
3. The data represented dependent observations.

Additionally, Cohen's d was calculated to determine the magnitude of the intervention effect.
The level of statistical significance was established at: $p < .05$
All analyses were conducted using standard statistical procedures appropriate for counselling intervention research.

Chapter Summary

This chapter described the methodological procedures employed to investigate the effectiveness of counselling in reducing perceived stress among menopausal women. A quantitative pre–post experimental design was adopted, involving 50 menopausal women assessed using the Perceived Stress Scale (PSS-10). Participants completed structured counselling sessions focusing on stress management, emotional awareness, cognitive restructuring, and coping skill enhancement. Data were analyzed using descriptive statistics, paired-sample t-tests, and effect size estimation. Ethical principles were maintained throughout the research process. The subsequent chapter presents the statistical analysis and findings derived from the collected data.

V. Results and Findings

This chapter presents the statistical analysis and findings of the study conducted to examine the effectiveness of counselling in reducing perceived stress among menopausal women. The analysis was performed using both descriptive and inferential statistical techniques. Descriptive statistics were used to summarize participant characteristics and perceived stress levels, while inferential statistics were employed to evaluate whether counselling intervention resulted in significant reductions in perceived stress.

The findings are presented in accordance with the objectives and hypotheses of the study.

Demographic Characteristics of Participants

A total of 50 menopausal women participated in the study. Information regarding age, marital status, educational qualification, and duration since menopause was collected to describe the sample.

Table 1. *Demographic Profile of Participants (N = 50)*

Variable	Category	Frequency	Percentage
Age	45–48 Years	12	24.0
	49–52 Years	22	44.0
	53–55 Years	16	32.0
Marital Status	Married	39	78.0
	Widowed	7	14.0
	Divorced	4	8.0
Education	School	10	20.0
	Graduate	24	48.0
	Postgraduate	13	26.0
	Other	3	6.0
Duration Since Menopause	Less than 1 Year	11	22.0
	1–3 Years	19	38.0
	3–5 Years	12	24.0
	More than 5 Years	8	16.0

Interpretation

The majority of participants (44%) belonged to the 49–52 years age group. Most respondents were

married (78%) and nearly half possessed graduate-level education (48%). The largest proportion of participants (38%) reported experiencing menopause for one to three years. These findings indicate that the sample adequately represented women in the typical menopausal age range.

Objective 1 : To Assess the Level of Perceived Stress among Menopausal Women Prior to Counselling Intervention

Descriptive statistics were calculated to determine baseline perceived stress levels among participants before counselling intervention.

Table 2. *Descriptive Statistics of Pre-Test and Post-Test Stress Scores*

Variable	N	Mean	SD	Minimum	Maximum
Pre-Test Stress Score	50	25.20	4.03	17	34
Post-Test Stress Score	50	20.80	5.47	11	31

Interpretation

The mean pre-test perceived stress score was 25.20 (SD = 4.03), indicating moderate to high stress among participants prior to intervention. Following counselling, the mean stress score decreased to 20.80 (SD = 5.47), suggesting a noticeable improvement in perceived stress levels. The reduction in average stress scores provides preliminary evidence regarding the effectiveness of counselling intervention.

Objective 2 : To Evaluate the Effectiveness of Counselling in Reducing Perceived Stress among Menopausal Women

To evaluate counselling effectiveness, mean differences between pre-test and post-test stress scores were examined.

Table 3. *Mean Reduction in Perceived Stress Following Counselling*

Variable	Mean Score
Pre-Test Stress Score	25.20
Post-Test Stress Score	20.80
Mean Reduction	4.40

Interpretation

Participants demonstrated an average reduction of 4.40 points on the Perceived Stress Scale following counselling intervention.

This reduction suggests that counselling contributed positively to stress management and emotional adjustment among menopausal women.

The observed change is clinically meaningful because even moderate reductions in perceived stress are associated with improvements in emotional well-being, coping effectiveness, and overall quality of life.

Objective 3 : To Compare Stress Levels Before and After Counselling Intervention

A paired-sample t-test was conducted to determine whether the observed reduction in perceived stress was statistically significant.

Hypothesis Testing

Null Hypothesis (H_{01})

There is no significant difference in perceived stress levels among menopausal women before and after counselling intervention.

Alternative Hypothesis (H_{11})

There is a significant difference in perceived stress levels among menopausal women before and after counselling intervention.

Table 4. *Paired Sample t-Test Comparing Pre-Test and Post-Test Stress Scores*

Variable	Mean (Pre)	Mean (Post)	Mean Difference	t	df	p
Perceived Stress	25.20	20.80	4.40	8.26	49	< .001

Interpretation

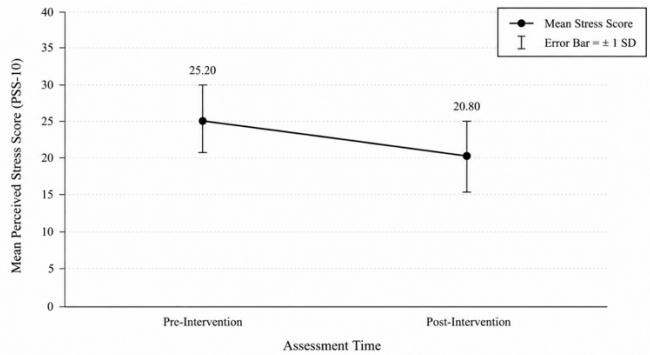
The paired-sample t-test revealed a statistically significant difference between pre-test and post-test perceived stress scores, $t(49) = 8.26$, $p < .001$. Because the obtained p-value was substantially lower than the accepted significance level of .05, the null hypothesis was rejected.

The findings indicate that counselling intervention resulted in a significant reduction in perceived stress among menopausal women.

The results provide empirical support for the effectiveness of counselling as a stress-management intervention during menopause.

To provide a visual representation of counselling effectiveness, the mean perceived stress scores obtained before and after the intervention are presented in Figure 2. The figure illustrates the decline in perceived stress levels following counselling and highlights the magnitude of improvement observed among participants.

Figure 2. *Comparison of Pre-Test and Post-Test Mean Perceived Stress Scores among Menopausal Women*



Note. Mean perceived stress scores were measured using the Perceived Stress Scale (PSS-10). Error bars represent ±1 standard deviation. Pre-intervention stress levels (M = 25.20, SD = 4.03) were significantly higher than post-intervention stress levels (M = 20.80, SD = 5.47). The reduction in perceived stress following counselling intervention was statistically significant, $t(49) = 8.26$, $p < .001$, with a large effect size (Cohen's d = 1.17). Lower scores indicate lower perceived stress.

As illustrated in Figure 2, the mean perceived stress score decreased from 25.20 during the pre-test assessment to 20.80 during the post-test assessment. The downward trend visually demonstrates the positive impact of counselling intervention on participants' perceived stress levels. The reduction observed is consistent with the statistical findings obtained through paired-sample t-test analysis and provides additional evidence supporting the effectiveness of counselling in promoting psychological adjustment among menopausal women.

Objective 4 : To Examine the Role of Counselling in Enhancing Coping Capacity and Psychological Adjustment

Although coping capacity was not measured directly using a separate instrument, changes in perceived stress levels and stress-category distribution provide indirect evidence regarding psychological adjustment and adaptive coping.

Table 5. *Distribution of Participants Across Stress Categories Before Counselling*

Stress Level	Frequency	Percentage
Low Stress	2	4.0
Moderate Stress	32	64.0
High Stress	16	32.0
Total	50	100.0

Table 6. *Distribution of Participants Across Stress Categories After Counselling*

Stress Level	Frequency	Percentage
Low Stress	12	24.0
Moderate Stress	33	66.0
High Stress	5	10.0
Total	50	100.0

Interpretation

Prior to counselling, nearly one-third of participants (32%) were classified within the high-stress category. Following counselling intervention, the proportion of high-stress participants declined substantially to 10%.

Simultaneously, the proportion of participants categorized as experiencing low stress increased from 4% to 24%.

These findings suggest meaningful improvements in psychological adjustment and coping effectiveness following counselling intervention. The observed shifts indicate that counselling may have enhanced participants' ability to manage stressors and respond more adaptively to menopausal challenges.

Effect Size Analysis

Statistical significance indicates whether an intervention effect exists, whereas effect size reflects the practical magnitude of the observed change.

Accordingly, Cohen's d was calculated.

Table 7. *Effect Size of Counselling Intervention*

Measure	Value
Cohen's d	1.17
Interpretation	Large Effect

Interpretation

According to Cohen's guidelines (1988), effect sizes of 0.20, 0.50, and 0.80 represent small, medium, and large effects respectively.

The obtained effect size of 1.17 indicates a large intervention effect.

This finding suggests that counselling not only produced statistically significant improvements but also generated meaningful practical benefits for participants.

The magnitude of the observed effect supports counselling as an effective psychological intervention for reducing perceived stress among menopausal women.

Summary of Hypothesis Testing

Table 8. *Hypothesis Testing Summary*

Hypothesis	Result	Decision
H_{01}: There is no significant difference in perceived stress levels before and after counselling intervention.	$t(49) = 8.26$, $p < .001$	Rejected
H_{02}: Counselling intervention does not significantly reduce perceived stress among menopausal women.	Significant reduction observed	Rejected

Major Findings of the Study

The major findings emerging from the analysis are summarized below:

1. Menopausal women reported moderate to high levels of perceived stress prior to counselling intervention.
2. Mean perceived stress scores decreased from 25.20 to 20.80 following counselling.
3. Participants demonstrated an average stress reduction of 4.40 points on the PSS-10 scale.
4. The reduction in stress scores was statistically significant, $t(49) = 8.26$, $p < .001$.
5. Counselling intervention produced a large practical effect ($d = 1.17$).
6. High-stress cases decreased from 32% to 10% following intervention.
7. Low-stress cases increased from 4% to 24% after counselling.
8. Both null hypotheses were rejected.
9. The findings support the effectiveness of counselling in reducing perceived stress among menopausal women.

Chapter Summary

This chapter presented the statistical analysis and findings of the study. Descriptive statistics indicated moderate to high stress levels before counselling, followed by meaningful reductions

after intervention. Inferential analysis confirmed that counselling significantly reduced perceived stress among menopausal women. The large effect size and positive shift in stress-category distribution further support the effectiveness of counselling as a valuable psychological intervention during menopause. The next chapter discusses these findings in relation to existing literature, theoretical frameworks, and practical implications

VI. Discussion

The primary objective of the present study was to examine the effectiveness of counselling in reducing perceived stress among menopausal women. Using a pre–post experimental design, the study assessed stress levels before and after a structured counselling intervention among 50 menopausal women aged 45–55 years. The findings revealed a statistically significant reduction in perceived stress following counselling intervention, indicating that counselling can serve as an effective psychological strategy for promoting emotional well-being during menopause.

This chapter discusses the findings in relation to the study objectives, theoretical frameworks, and existing literature. The implications of the findings for counselling psychology, women's mental health, and healthcare practice are also examined.

Interpretation of Baseline Stress Levels among Menopausal Women

The first objective of the study was to assess the level of perceived stress among menopausal women prior to counselling intervention. The findings revealed a mean pre-test stress score of 25.20, indicating moderate to high levels of perceived stress among participants. Furthermore, approximately one-third of the participants were classified within the high-stress category before intervention.

These findings are consistent with a substantial body of literature indicating that menopause is frequently associated with elevated psychological distress. Menopause represents a period of considerable physiological and psychosocial adjustment, during which women experience hormonal changes alongside evolving family, occupational, and social responsibilities. Such transitions often contribute to increased perceptions of stress and emotional burden (Freeman, 2020; Thurston et al., 2021).

The observed stress levels may be understood through the lens of the Stress and Coping Theory proposed by Lazarus and Folkman (1984). According to this framework, stress arises when individuals perceive environmental demands as exceeding their coping resources. Menopausal women often face multiple concurrent demands, including managing physical symptoms, adapting to changing family roles, caring for aging parents, supporting children, and addressing concerns related to health and aging. When these demands are perceived as overwhelming, elevated levels of perceived stress may result.

The findings also support recent research suggesting that menopausal symptoms and perceived stress are closely interconnected. Geukes et al. (2024) reported that women experiencing more severe menopausal symptoms often demonstrate higher stress levels and poorer emotional adjustment. Similarly, Green and Santoro (2023) found that psychological well-being during menopause is strongly influenced by both symptom severity and available coping resources.

Within the Indian sociocultural context, additional factors may contribute to elevated stress levels. Women often continue to prioritize family responsibilities over personal well-being and may have limited opportunities for emotional expression or psychological support. Consequently, psychological distress associated with menopause may remain underrecognized and inadequately addressed, increasing vulnerability to chronic stress (Patel et al., 2022).

Effectiveness of Counselling in Reducing Perceived Stress

The second objective of the study was to evaluate the effectiveness of counselling in reducing perceived stress among menopausal women. The findings demonstrated a significant reduction in stress scores following counselling intervention, with mean scores decreasing from 25.20 before intervention to 20.80 after intervention.

This reduction indicates that counselling contributed positively to stress management and psychological adjustment among participants. The average reduction of 4.40 points on the PSS-10 scale suggests meaningful improvement in participants' perceptions of life stressors, emotional coping, and psychological well-being.

The effectiveness of counselling observed in the present study aligns with extensive research supporting psychological interventions for stress reduction. Counselling provides individuals with opportunities to explore emotional concerns, challenge maladaptive beliefs, develop adaptive coping strategies, and enhance emotional regulation. Through these mechanisms, counselling may facilitate healthier responses to life challenges and reduce subjective experiences of stress (Corey, 2021).

The findings are consistent with those reported by Cuijpers et al. (2023), whose meta-analysis demonstrated that counselling and psychological interventions produce significant reductions in stress-related symptoms across diverse populations. Similarly, Maki et al. (2022) reported that structured psychological interventions improve emotional functioning and reduce psychological distress among women experiencing menopausal transition.

The observed reduction in stress may also reflect improvements in participants' understanding of menopause. Psychoeducation provided during counselling sessions likely helped normalize menopausal experiences, reducing uncertainty and emotional distress. Women who understand menopause as a natural developmental transition may be less likely to interpret symptoms as threatening or uncontrollable, thereby reducing stress perception.

Counselling and Cognitive Appraisal Processes

One of the central assumptions of the Stress and Coping Theory is that stress is influenced by cognitive appraisal processes. Counselling interventions frequently target these appraisal mechanisms by helping individuals reinterpret stressors and develop more adaptive perspectives. The significant reduction in perceived stress observed in the present study suggests that counselling may have altered participants' cognitive evaluations of menopausal experiences. Prior to intervention, participants may have perceived menopausal symptoms and associated life changes as overwhelming or difficult to manage. Following counselling, participants may have developed greater confidence in their ability to cope with these challenges.

This interpretation is supported by cognitive-behavioral models, which propose that emotional distress is often maintained by maladaptive thought patterns and dysfunctional beliefs. Counselling facilitates cognitive restructuring by helping individuals identify negative interpretations and replace them with more balanced and adaptive perspectives (Ayers et al., 2023).

For example, women who initially viewed menopause as a sign of decline or loss may, through counselling, begin to perceive it as a normal life transition. Such cognitive shifts can substantially reduce emotional distress and perceived stress, even when external circumstances remain unchanged.

The findings therefore provide empirical support for the proposition that counselling influences psychological outcomes not only by addressing external stressors but also by transforming cognitive appraisal processes.

Counselling and Coping Enhancement

The fourth objective of the study was to examine the role of counselling in enhancing coping

capacity and psychological adjustment. Although coping was not measured directly using a separate standardized instrument, changes in stress levels and stress-category distribution provide indirect evidence regarding improvements in coping effectiveness.

The proportion of participants categorized within the high-stress group declined from 32% before intervention to 10% after intervention. Simultaneously, the proportion of participants classified within the low-stress category increased from 4% to 24%.

These findings suggest that participants developed more adaptive responses to menopausal challenges following counselling. Counselling interventions frequently focus on strengthening coping skills, improving problem-solving abilities, fostering emotional awareness, and enhancing resilience. Such improvements may reduce perceptions of stress and increase psychological adjustment.

The findings are consistent with resilience research demonstrating that adaptive coping serves as an important protective factor during menopause. Bromberger et al. (2023) found that women who utilize effective coping strategies report lower stress levels and better psychological well-being. Similarly, Gross (2022) observed that emotional regulation skills contribute significantly to resilience and adaptive functioning during periods of life transition.

The counselling intervention utilized in the present study incorporated stress management strategies, emotional awareness exercises, cognitive restructuring, and coping skill development. These components likely contributed to participants' improved ability to manage emotional challenges associated with menopause.

Significance of the Effect Size

In addition to statistical significance, the present study examined the practical significance of counselling intervention through effect size analysis. The obtained Cohen's d value of 1.17 indicates a large intervention effect.

This finding suggests that counselling produced not only statistically detectable improvements but also meaningful practical benefits. Large effect sizes are particularly important in applied psychological research because they indicate that observed changes are likely to have real-world relevance for participants' daily functioning and well-being.

The magnitude of the effect observed in the present study is consistent with previous research demonstrating that structured counselling interventions can produce substantial psychological benefits among populations experiencing stress-related difficulties (Cuijpers et al., 2023). While counselling may not eliminate all sources of stress, it appears capable of significantly improving individuals' capacity to manage stress effectively.

From a clinical perspective, the observed effect size supports the inclusion of counselling services within women's healthcare programmes. Psychological interventions that produce meaningful improvements in stress outcomes may contribute to better emotional functioning, enhanced quality of life, and improved overall health.

Integration with the Biopsychosocial Model

The findings of the present study strongly support the Biopsychosocial Model proposed by Engel (1977). Menopause is often viewed primarily as a biological phenomenon; however, the observed effectiveness of counselling demonstrates that psychological interventions can significantly influence health outcomes during this life stage.

The reduction in perceived stress suggests that psychological and social factors play an important role in menopausal adaptation. While hormonal changes may contribute to emotional vulnerability, counselling appears capable of mitigating psychological distress by enhancing coping resources, emotional regulation, and cognitive appraisal processes.

The findings therefore reinforce the importance of adopting holistic approaches to menopausal healthcare. Effective management of menopause requires attention not only to physical symptoms but also to psychological well-being and social support systems. Integrating counselling services into routine healthcare may facilitate more comprehensive and person-centered care for menopausal women.

Practical Implications

The findings have several practical implications for counselling psychology, women's health services, and mental health promotion.

First, the study highlights the value of counselling as a non-pharmacological intervention for stress management during menopause. Healthcare providers may consider incorporating counselling services into menopause management programmes to address emotional and psychological concerns alongside physical symptoms.

Second, counsellors and psychologists working with midlife women should recognize menopause as a significant developmental transition that may require targeted psychological support. Structured interventions focusing on stress management, coping enhancement, and emotional regulation may help women adapt more effectively to menopausal changes.

Third, the findings support increased awareness regarding menopause-related mental health concerns. Educational programmes and community outreach initiatives may help reduce stigma surrounding both menopause and psychological help-seeking behavior.

Finally, policymakers and healthcare administrators may consider integrating mental health services within women's healthcare settings to promote holistic well-being and improve quality of life among menopausal women.

Chapter Summary

The discussion of findings indicates that menopausal women experience substantial levels of perceived stress and that counselling intervention can significantly reduce this stress. The findings are consistent with the Biopsychosocial Model and Stress and Coping Theory, both of which emphasize the importance of psychological processes in health outcomes. Counselling appears to enhance coping capacity, modify cognitive appraisal processes, and improve psychological adjustment during menopause. The large effect size and meaningful changes in stress-category distribution further support counselling as an effective intervention for promoting emotional well-being among menopausal women. The subsequent chapter presents the study's implications, limitations, future research directions, and conclusion.

VII. Implications, Limitations, Future Research Directions and Conclusion

Practical Implications

The findings of the present study have important implications for counselling psychology, women's mental health, healthcare practice, and public health policy. The significant reduction in perceived stress following counselling intervention suggests that psychological support services can play a valuable role in improving emotional well-being during menopause.

Implications for Counselling Psychology

The findings reinforce the importance of counselling as an effective intervention for managing menopause-related stress. Counselling psychologists can contribute significantly to women's health by providing structured support during this important life transition. The results indicate that interventions focusing on emotional awareness, cognitive restructuring, stress management, and coping skill enhancement may effectively reduce perceived stress among menopausal women.

Counsellors working with midlife women should recognize menopause as a developmental

transition that extends beyond physiological changes. Addressing emotional concerns, self-perceptions, stress appraisals, and coping resources may facilitate healthier psychological adjustment and improve overall well-being.

The findings also support the use of psychoeducational approaches within counselling practice. Educating women about menopause, common emotional experiences, and adaptive coping strategies may reduce uncertainty and empower individuals to manage challenges more effectively.

Implications for Healthcare Professionals

Healthcare professionals frequently focus on the physical manifestations of menopause while psychological symptoms receive comparatively less attention. The present findings suggest that stress management should be considered an integral component of menopause care.

Gynecologists, primary care physicians, nurses, and women's health specialists may benefit from incorporating psychological screening into routine menopausal assessments. Early identification of elevated stress levels may facilitate timely referral to counselling services and prevent the development of more severe psychological difficulties.

Interdisciplinary collaboration between medical and mental health professionals may improve the quality of care provided to menopausal women. Integrating counselling services within women's healthcare settings could promote holistic treatment approaches that address both physical and psychological needs.

Implications for Women's Mental Health Programmes

The findings support the development of community-based mental health programmes targeting menopausal women. Such programmes could include counselling services, support groups, stress management workshops, and psychoeducational interventions designed to promote emotional well-being and resilience.

Many women experience menopause without adequate psychological support. Community initiatives aimed at increasing awareness regarding menopause-related mental health concerns may encourage help-seeking behavior and reduce stigma associated with counselling utilization.

Implications for Policy and Public Health

The results highlight the need for greater recognition of menopause as a public health concern. Policymakers may consider integrating psychological services within reproductive and women's health programmes to ensure comprehensive care throughout the lifespan.

Given increasing life expectancy worldwide, women spend a substantial proportion of their lives in post-menopausal years. Consequently, promoting psychological well-being during menopause may have significant long-term benefits for quality of life, productivity, and overall health outcomes.

Healthcare policies that support access to counselling services may contribute to improved mental health among midlife women and reduce the broader social and economic burden associated with untreated psychological distress.

Limitations of the Study

Although the present study contributes valuable insights regarding counselling effectiveness among menopausal women, several limitations should be acknowledged.

Sample Size

The study was conducted using a sample of 50 participants. While this sample size was sufficient for the statistical analyses performed, larger samples would enhance the generalizability of findings and provide greater statistical power.

Sampling Technique

Convenience sampling was employed due to practical considerations. Although commonly used in counselling research, convenience sampling

may limit representativeness and increase the possibility of selection bias. Participants who volunteered for counselling may differ from the broader population of menopausal women.

Single-Group Design

The study utilized a single-group pre–post design without a control group. Consequently, it is not possible to completely rule out alternative explanations for observed improvements, such as natural adaptation, social support, or external life events occurring during the intervention period.

Future studies incorporating randomized controlled designs may provide stronger evidence regarding causal relationships.

Reliance on Self-Report Measures

Perceived stress was assessed using a self-report instrument. Self-report measures are susceptible to response biases, including social desirability effects and subjective interpretation of questionnaire items. Participants may have reported improvements that reflected perceived expectations rather than actual changes.

Short-Term Assessment

The study assessed stress immediately following counselling intervention. Long-term follow-up assessments were not conducted. Consequently, the sustainability of intervention effects over extended periods remains unknown.

Future longitudinal studies may determine whether reductions in stress are maintained months or years following counselling.

Limited Range of Psychological Variables

The study focused exclusively on perceived stress. Other relevant psychological outcomes such as anxiety, depression, resilience, self-efficacy, emotional regulation, and quality of life were not assessed. Examining these variables may provide a more comprehensive understanding of counselling outcomes during menopause.

Future Research Directions

The findings and limitations of the present study suggest several directions for future investigation.

Larger and More Diverse Samples

Future studies should include larger and more diverse participant groups representing different regions, socioeconomic backgrounds, educational levels, and cultural contexts. Such investigations would enhance the external validity of findings and facilitate broader generalization.

Randomized Controlled Trials

Randomized controlled trials comparing counselling interventions with control or comparison groups would strengthen causal conclusions regarding counselling effectiveness. Controlled studies may help isolate intervention effects from other influences.

Longitudinal Research

Long-term follow-up studies are needed to determine whether counselling-related improvements are sustained over time. Assessments conducted six months or one year after intervention could provide valuable information regarding the durability of treatment effects.

Comparative Intervention Studies

Future research could compare different counselling approaches, including cognitive-behavioral counselling, mindfulness-based interventions, supportive counselling, acceptance and commitment therapy, and group counselling programmes.

Such comparisons may identify the most effective intervention strategies for reducing menopause-related stress.

Examination of Additional Psychological Outcomes

Future studies should examine variables such as:

- Anxiety
- Depression
- Psychological resilience
- Emotional regulation

- Self-esteem
- Self-efficacy
- Quality of life
- Social support

Investigating these outcomes would provide a more comprehensive understanding of psychological adaptation during menopause.

Cross-Cultural Investigations

Cross-cultural studies examining menopausal experiences across different social and cultural contexts may enhance understanding of how cultural beliefs influence stress perception and intervention effectiveness.

Mediation and Moderation Analyses

Future research may explore factors that mediate or moderate counselling outcomes. Variables such as resilience, social support, symptom severity, and coping style may influence intervention effectiveness and warrant further investigation.

Conclusion

Menopause represents a significant biopsychosocial transition that can substantially influence women's emotional well-being and perceived stress levels. Although menopause is a natural developmental process, the combination of hormonal changes, psychosocial demands, and evolving life circumstances may create considerable psychological challenges for many women.

The present study sought to examine the effectiveness of counselling in reducing perceived stress among menopausal women using a quantitative pre–post experimental design. The findings demonstrated a significant reduction in perceived stress following counselling intervention. Participants exhibited lower post-intervention stress scores, a meaningful reduction in average stress levels, and positive shifts in stress-category distribution. Statistical analysis confirmed that these improvements were significant and associated with a large practical effect.

The findings support both the Biopsychosocial Model and Stress and Coping Theory by demonstrating that psychological interventions can positively influence health outcomes during menopause. Counselling appears to facilitate healthier cognitive appraisal processes, strengthen coping resources, enhance emotional regulation, and promote psychological adjustment.

The study contributes to the growing body of literature emphasizing the importance of non-pharmacological interventions in women's mental health. The results suggest that counselling should be considered a valuable component of comprehensive menopause care and highlight the need for greater integration of mental health services within women's healthcare programmes.

In conclusion, counselling represents an effective and practical strategy for reducing perceived stress among menopausal women. By addressing emotional and psychological needs alongside physical health concerns, counselling can promote resilience, improve well-being, and support healthier adaptation during one of the most significant transitions in a woman's life.

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