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Positive Affect as a Coping Resource in Chronic Stress : A Systematic Review of Mechanisms, Outcomes, and Interventions

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Abstract

Abstract Chronic stress remains a critical public health concern, yet emerging evidence suggests that positive affect (PA) serves as a vital adaptive resource during prolonged adversity. This systematic review synthesizes 42 peer-reviewed studies (2000–2025) to examine the mechanisms through which PA facilitates coping and resilience

- . Findings indicate that PA co-occurs with distress and is primarily generated through meaning-focused coping strategies, such as benefit-finding and goal reordering
- . Physiologically, PA supports the "undoing hypothesis" by accelerating cardiovascular and HPA axis recovery
- . Furthermore, PA builds enduring psychological capital and independently predicts reduced long-term morbidity and mortality
- . In the Arab context, religious values and social solidarity emerge as culturally specific pathways for PA generation
- . These results underscore the necessity of integrating positive emotion cultivation into stress interventions, emphasizing culturally sensitive adaptations for Arab populations to enhance psychological well-being and health outcomes

Keywords: positive affect, chronic stress, coping, resilience, undoing hypothesis, Arab context.

1. Introduction

1.1 Background

Chronic stress constitutes one of the most pervasive challenges to contemporary public health, with extensive documentation of its deleterious effects on psychological well-being, cardiovascular function, immune competence, and overall mortality (Cohen et al., 2007; McEwen, 1998). In Algeria and the broader Arab world, this problem is exacerbated by rapid socioeconomic transitions, high unemployment rates, occupational pressures, and the political and security challenges that have characterized the region in recent decades (UNDP, 2022; World Health Organization, 2023). Local studies have indicated elevated rates of depression and anxiety associated with chronic stress, particularly among women and youth populations (Sabah et al., 2025; Boussof et al., 2023).

The transactional model of stress and coping, originally articulated by Lazarus and Folkman (1984), fundamentally shaped understanding of how individuals appraise and respond to environmental demands that exceed available resources. This framework, however, initially emphasized negative emotional outcomes—anxiety, depression, and distress—as the primary consequences of stressful encounters.

A significant theoretical advancement emerged when Folkman (1997) challenged this unidimensional perspective, demonstrating that positive emotions not only co-occur with negative emotions during intensely stressful experiences but also serve unique adaptive functions that cannot be reduced to the mere absence of negative affect. This theoretical shift holds particular relevance in Arab contexts where religious and social coping strategies may serve as rich sources for generating meaning and positive affect even in the face of adversity (Abu-Raiya & Pargament, 2015; Rassool, 2021).

1.2 Theoretical Frameworks

Two complementary theoretical frameworks underpin contemporary understanding of positive affect in the stress process. First, Folkman's revised stress and coping model (1997) introduced the concept of meaning-focused coping, which involves generating positive meaning through benefit finding, adaptive goal processes, reordering priorities, and infusing ordinary events with positive significance. This form of coping becomes particularly salient when direct problem resolution is unattainable—a common feature of chronic stressors such as caregiving, chronic illness, and bereavement. In Arab-Islamic culture, this dimension may take religious forms, such as finding divine meaning in hardship (*ḥusn al-zann billāh, iḥtisāb*), which have been associated with better mental health outcomes (Aflakseir & Coleman, 2009; Rassool, 2021).

Second, Fredrickson's broaden-and-build theory (1998, 2001) provides a mechanism for understanding why positive emotions matter beyond momentary hedonic experience. Unlike negative emotions, which narrow attention and action tendencies to facilitate immediate survival, positive emotions broaden the momentary thought-action repertoire, expanding cognitive flexibility and behavioral options. Over time, these broadened experiences build enduring personal resources—intellectual, social, and psychological assets that remain available beyond the transient emotional state. These resources include resilience, optimism, self-efficacy, and social connectedness (Fredrickson et al., 2003). In Arab societies, close family relationships and social solidarity may serve analogous protective functions (Dwairy, 2006; Al-Krenawi & Graham, 2000).

The undoing hypothesis (Fredrickson & Levenson, 1998) extends this framework by proposing that positive emotions can rapidly reverse the physiological consequences of negative emotional arousal, accelerating recovery from cardiovascular reactivity and HPA axis activation. This physiological mechanism provides a direct pathway through which positive affect may protect against the health-damaging effects of chronic stress.

1.3 Rationale and Objectives

Despite substantial theoretical and empirical advances, the literature on positive affect and chronic stress has not been systematically synthesized to clarify mechanisms, outcomes, and intervention implications. Existing reviews have tended to focus on specific populations, particular theoretical frameworks, or limited outcome domains (Egan et al., 2024). A comprehensive synthesis integrating psychological, physiological, and health outcomes across diverse chronic stress contexts is needed to consolidate knowledge and guide future research and practice.

Special Relevance to the Arab Context:

This review holds particular significance for several reasons:

1. Elevated stress levels: Reports indicate high levels of chronic stress in the Arab region due to economic and political instability (UNDP, 2022).
2. Research gap: Most research in this field has been conducted in Western contexts, with limited understanding of coping mechanisms in Arab and Islamic cultures.
3. Cultural specificities: Arab cultural values—such as family solidarity, religious faith, and social interdependence—may produce unique coping mechanisms that differ from Western models (Al-Krenawi & Graham, 2000; Dwairy, 2006).
4. Intervention potential: Understanding these mechanisms can contribute to the development of culturally appropriate psychological interventions for Arab populations (Basurrah et al., 2023).

1.4 Research Question

This systematic review addresses the following question: How does positive affect function as a coping resource in the context of chronic stress, and through which psychological and physiological pathways does it contribute to resilience and well-being? Specifically, the review examines:

1. The co-occurrence of positive and negative affect during chronic stress
2. Meaning-focused coping as a mechanism for generating positive affect
3. Physiological recovery pathways (the undoing hypothesis)
4. Positive emotion upregulation as an adaptive strategy
5. The relationship between positive affect and resilience
6. Psychological capital as a mediating mechanism
7. Long-term health outcomes associated with positive affect
8. Implications for the Arab and Islamic context

2. Methodology

2.1 Study Design

This study constitutes a systematic review conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021). The review protocol was not pre-registered.

2.2 Search Strategy

A comprehensive literature search was conducted across four electronic databases: PsycINFO, PubMed, Scopus, and Web of Science. The search covered peer-reviewed studies published between January 2000 and December 2025, reflecting the period during which the broaden-and-build theory and Folkman's revised model gained empirical traction.

The following Boolean search strategy was employed, combining keywords with AND/OR operators:

- Positive affect terms: ("positive affect" OR "positive emotion" OR "positive feeling" OR "positive mood" OR "well-being" OR "subjective well-being")
- AND Stress terms: ("chronic stress" OR "prolonged stress" OR "ongoing stress" OR "caregiver stress" OR "caregiving" OR "bereavement" OR "HIV/AIDS" OR "chronic illness" OR "occupational stress" OR "workplace stress")
- AND Coping/Resilience terms: ("coping" OR "adaptation" OR "meaning-focused coping" OR "resilience" OR "psychological capital" OR "PsyCap" OR "benefit finding" OR "posttraumatic growth")
- AND Theoretical/Mechanism terms: ("broaden-and-build" OR "undoing hypothesis" OR "physiological recovery" OR "HPA axis" OR "cardiovascular recovery" OR "cortisol")

Additional search for Arab context: A supplementary search was conducted using terms such as ("Arab" OR "Islamic" OR "Muslim" OR "Middle East" OR "Algeria" OR "North Africa") combined with the main search terms to identify culturally relevant studies. Reference lists of included studies and relevant review articles were manually screened to identify additional eligible studies.

2.3 Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Peer-reviewed empirical studies (quantitative, qualitative, or mixed-methods)	Theoretical or opinion papers without empirical data
Published in English, French, or Arabic	Publications in other languages
Adult populations (≥ 18 years)	Studies with child/adolescent populations only
Examined positive affect in chronic stress context	Did not address chronic stress as a primary variable
Reported outcomes related to coping, resilience, mental health, or physiological markers	Single case studies without generalizability
Studies from any geographic region, with priority given to Arab context studies when available	Studies focusing exclusively on acute stress

2.4 Study Selection Process

The selection process followed the PRISMA flow diagram (Page et al., 2021):

1. Identification: Records were identified through database searching. Duplicate records were removed using reference management software (EndNote X9).
2. Screening: Titles and abstracts were screened independently by the author (Bachir, A.) against the inclusion criteria. Disagreements were resolved through discussion.
3. Full-text assessment: Full texts of potentially eligible studies were retrieved and assessed for eligibility against the inclusion criteria. Reasons for exclusion were documented.
4. Final inclusion: Studies meeting all criteria were included in the final narrative synthesis.

2.5 Data Extraction

Data were extracted from each included study using a standardized extraction form developed for this review. Extracted information included:

- Author(s) and year of publication
- Study design (cross-sectional, longitudinal, experimental, intervention)
- Sample characteristics (size, population type, age, gender distribution, country)
- Type of chronic stressor (e.g., caregiving, chronic illness, bereavement, occupational stress)
- Measures of positive affect and negative affect (instruments used)
- Theoretical framework employed
- Primary outcome measures (coping, resilience, physiological markers, mental health)
- Key findings relevant to the research question
- Effect sizes and statistical significance (where reported)
- Cultural/contextual factors (where applicable)

2.6 Quality Assessment

Methodological quality of included studies was assessed using validated tools appropriate to study design:

- Cross-sectional studies: JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies (Moola et al., 2020)

- Longitudinal studies: Newcastle-Ottawa Scale (NOS; Wells et al., 2000)
- Experimental/Intervention studies: Cochrane Risk of Bias Tool (Higgins et al., 2011)

Studies were not excluded based on quality assessment but were interpreted with appropriate caution, with quality ratings informing the strength of conclusions drawn.

2.7 Synthesis of Findings

Due to considerable heterogeneity in study designs, populations, stressor types, and outcome measures, a narrative synthesis approach was adopted (Popay et al., 2006). Findings were organized thematically around the following domains:

1. Co-occurrence of positive and negative affect during chronic stress
2. Meaning-focused coping mechanisms
3. Physiological stress recovery (undoing hypothesis)
4. Positive emotion upregulation as a coping strategy
5. Positive affect and resilience
6. Psychological capital as a mediating mechanism
7. Long-term health outcomes
8. Implications for Arab and Islamic contexts (added in discussion)

Findings were interpreted considering methodological quality, study design, and consistency of evidence across studies.

3. Results

3.1 Study Selection and Characteristics

The systematic search yielded 847 initial records across databases. After removing duplicates (*n* = 213), 634 records underwent title and abstract screening, resulting in 128 full-text articles assessed for eligibility. Following full-text review, 42 studies met inclusion criteria and were included in the narrative synthesis.

Figure 1: PRISMA Flow Diagram

Stage	Number of Records
Records identified through database searching	847
Records after duplicates removed	634
Records screened (title/abstract)	634
Records excluded	506
Full-text articles assessed for eligibility	128
Full-text articles excluded	86
Studies included in narrative synthesis	42

Characteristics of Included Studies:

Characteristic	Number
Longitudinal studies	18
Cross-sectional studies	14
Experimental/laboratory studies	6
Intervention studies	4
Total	42

Sample sizes ranged from 32 to 6,822 participants (median = 187). Populations represented included caregivers, HIV/AIDS patients, bereaved individuals, healthcare professionals, older adults, and general community samples. Studies were conducted primarily in North America (*n* = 27) and Europe (*n* = 11), with limited representation from Asia (*n* = 3) and Australia (*n* = 1).

Note on Arab context: No included studies featured samples from the Arab world. However, emerging research in the region (Basurrah et al., 2023; Al Eid et al., 2024; Sabah et al., 2025) was incorporated into the discussion to address cultural implications and identify research gaps.

3.2 Co-occurrence of Positive and Negative Affect During Chronic Stress

Finding: Robust evidence across diverse chronic stress populations demonstrates that positive and negative emotions co-occur rather than representing opposite poles of a single affective continuum.

Folkman et al. (1997) examined caregivers of individuals with HIV/AIDS and found that positive affect emerged alongside distress, with both affective states independently predicted by distinct coping processes. Positive affect was associated with meaning-focused coping efforts, while distress was regulated by emotion-focused processes directed at managing negative emotions.

Moskowitz et al. (1996) similarly found that HIV-positive men reported both positive and negative emotions throughout the course of their illness, with positive affect predicting better health outcomes independent of negative affect. This co-occurrence

pattern has been replicated across caregiving populations (Folkman & Moskowitz, 2000), bereaved individuals (Stroebe et al., 2005), and chronic illness populations (Zautra et al., 2005).

Quality of evidence: High; supported by multiple longitudinal studies with diverse populations.

Cultural implications: In Arab cultures, religious practices such as *dhikr* (remembrance of God), *du'ā'* (supplication), and *ṣabr* (patience) may serve as culturally specific pathways for experiencing positive affect alongside distress (Rassool, 2021). The Islamic concept of *riḍā* (contentment with divine will) reflects the coexistence of acceptance of difficulty with maintenance of positive spiritual states (Abu-Raiya & Pargament, 2015).

3.3 Meaning-Focused Coping: Mechanisms and Cultural Dimensions

Finding: Meaning-focused coping operates through four primary mechanisms, each with culturally specific expressions in Arab-Islamic contexts.

1. Benefit finding and reminding: Identifying positive outcomes or lessons from difficult experiences.

Affleck and Tennen (1996) demonstrated that individuals who found benefits following stressful events showed better adjustment outcomes. This process appears particularly important in chronic conditions where resolution is impossible.

Cultural expression: In Islamic tradition, benefit finding may be expressed through concepts such as *takfīr al-dhunūb* (expiation of sins through hardship) and *raf' al-darajāt* (elevation of spiritual rank). The Quranic verse "God does not burden a soul more than it can bear" (Quran 2:286) provides theological grounding for finding meaning in adversity (Rassool, 2021).

2. Adaptive goal processes: Adjusting goals to align with changing circumstances.

Wrosch et al. (2003) found that goal disengagement and reengagement predicted improved well-being in older adults facing unattainable goals.

Cultural expression: In Arab societies, goal adjustment often involves family-oriented reorientation, where individual goals may be modified to prioritize family needs and collective well-being (Dwairy, 2006).

3. Reordering priorities: Shifting values and priorities in response to adversity.

Tedeschi and Calhoun (1996) demonstrated that trauma can lead to positive changes in life priorities and appreciation, contributing to posttraumatic growth.

Cultural expression: In Islamic contexts, priority reordering may involve increased emphasis on spiritual development, charitable giving (*zakāt*, *ṣadaqah*), and family relationships, reflecting the Islamic emphasis on *al-ākhirah* (the hereafter) over worldly attachments (Rassool, 2021).

4. Infusing ordinary events with positive meaning: Finding significance and value in routine activities.

Folkman et al. (1997) found that HIV caregivers derived positive affect from ordinary events infused with meaning, such as seeing a sunset or having a pleasant conversation.

Cultural expression: Islamic practices encourage finding meaning in ordinary events through acts of gratitude (*shukr*) and mindfulness (*taqwā*), transforming mundane activities into acts of worship (*ibādah*) (Rassool, 2021).

Quality of evidence: Moderate to high; well-supported by qualitative and quantitative studies, though most evidence is cross-sectional, and causal direction requires longitudinal confirmation.

Supporting evidence from Arab contexts: Basurrah et al. (2023) found that positive psychology interventions adapted for Arab populations were significantly more effective when culturally grounded, suggesting that meaning-making processes in Arab contexts draw on culturally specific resources.

3.4 Physiological Recovery: The Undoing Hypothesis

Finding: Positive emotions accelerate physiological recovery from stress, supporting the undoing hypothesis through both cardiovascular and neuroendocrine pathways.

Fredrickson and Levenson (1998) first demonstrated the undoing effect experimentally, showing that participants who experienced positive emotions recovered more quickly from the cardiovascular effects of induced fear or anxiety. Fredrickson et al. (2000) replicated this finding, demonstrating that positive emotions speed recovery from negative emotional arousal across multiple cardiovascular measures.

A comprehensive quantitative review by Chida and Hamer (2008), including 729 studies, examined chronic psychosocial factors affecting physiological stress responsivity. Findings revealed that positive psychological states or traits were associated with reduced HPA axis reactivity—meaning that individuals with higher positive affect showed dampened cortisol responses to acute stressors. This protective effect remained significant after controlling for negative affect and demographic factors.

Tugade and Fredrickson (2004) extended these findings by demonstrating that resilient individuals exhibited faster cardiovascular recovery following stressful laboratory tasks, with positive emotions mediating this effect. Participants with higher trait resilience reported greater positive emotions during stress, which in turn predicted accelerated cardiovascular recovery.

Quality of evidence: High; well-established through experimental and laboratory studies with rigorous physiological measurement, though limited to acute stress paradigms. Chronic stress applications rely on cross-sectional or correlational designs.

Cultural implications: While the physiological mechanisms appear universal, cultural factors may influence the intensity and frequency of positive emotional experiences that trigger the undoing effect. Collectivist societies may experience more frequent positive emotions through social connection, potentially enhancing physiological recovery (Tov & Diener, 2007).

3.5 Positive Emotion Upregulation as an Adaptive Strategy

Finding: Individuals actively upregulate positive emotions during stressful experiences, though the effectiveness of these strategies varies based on individual characteristics such as depressive symptoms.

Recent ecological momentary assessment (EMA) research by Colombo et al. (2024) demonstrated that higher perceived stress predicted increased use of positive upregulating strategies—including attentional deployment, cognitive change, and response modulation. These strategies, when effectively implemented, resulted in diminished stress levels.

Importantly, Colombo et al. (2024) found that individuals with higher depressive symptoms implemented these strategies less effectively during intense stress, suggesting that depression impairs the capacity to generate positive affect as a coping resource. This finding has significant implications for understanding vulnerability and resilience, indicating that intervention may be particularly needed for those with compromised emotion regulation capacities.

Tugade and Fredrickson (2004) found that resilient individuals demonstrated greater ability to upregulate positive emotions during stressful laboratory tasks, with higher positive affect predicting faster cardiovascular recovery. This suggests that emotion regulation ability may be a key component of resilience.

Cywińska (2024) extended these findings to occupational settings, examining healthcare professionals during the COVID-19 pandemic. Self-coping strategies positively correlated with positive emotions, with resilience moderating this relationship. Healthcare workers who employed effective self-coping strategies reported higher positive affect, which in turn predicted better psychological well-being.

Quality of evidence: Moderate; EMA studies provide strong ecological validity, but the field would benefit from more experimental manipulation and longer-term longitudinal designs.

Cultural implications: Emotion regulation strategies may vary across cultures, with Arab populations potentially favoring strategies that incorporate religious practices (e.g., prayer, supplication) or social support seeking over individual cognitive reappraisal (Al-Krenawi & Graham, 2000; Basurrah et al., 2023).

3.6 Positive Affect and Resilience

Finding: The relationship between positive emotions and resilience is bidirectional: positive affect serves both as an outcome of successful adaptation and as a resilience resource that moderates the impact of stress on mental health.

Gloria and Steinhardt (2014) found that positive emotions enhanced resilience both directly and indirectly through the mediating role of adaptive coping strategies in a sample of university students. Resilience then moderated the influence of stress on anxiety and depressive symptoms, protecting individuals from the negative consequences of chronic stress. This suggests that positive emotions contribute to a virtuous cycle: positive affect → adaptive coping → resilience → stress buffering.

Fredrickson et al. (2003) provided compelling prospective evidence following the September 11, 2001, terrorist attacks. Participants who reported higher positive emotions in the aftermath exhibited greater resilience over time, with positive emotions predicting increased psychological resources including optimism, tranquility, and life satisfaction. These resources, in turn, predicted lower depressive symptoms at follow-up.

A comprehensive narrative review by Egan et al. (2024) synthesized evidence on positive affect's dual role in resilience:

- As an outcome measure: Positive affect signals successful adaptation following stressors
- As a resilience resource: Higher pre-stressor positive affect protects against depression and trauma symptoms
- As a moderator: Positive affect moderates the relationship between stress exposure and mental health outcomes

Quality of evidence: High; supported by prospective longitudinal designs and consistent replication across populations.

Cultural implications: In Arab societies, resilience resources may include religious faith, family cohesion, and community solidarity, which have been associated with better mental health outcomes following adversity (Abu-Raiya & Pargament, 2015; Al-Krenawi & Graham, 2000). Al Eid et al. (2024) found that psychological capital, including hope and optimism, significantly predicted psychological well-being among Saudi mothers of children with autism, supporting the cross-cultural applicability of these mechanisms.

3.7 Psychological Capital as a Mediating Mechanism

Finding: Psychological capital (PsyCap)—comprising hope, optimism, resilience, and self-efficacy—significantly mediates the relationship between chronic stress and well-being, serving as a psychological resource that buffers against stress-related impairment.

Drawing on broaden-and-build theory, Cywińska (2024) examined PsyCap as a mediating mechanism between burnout and psychological well-being in healthcare professionals. PsyCap significantly mediated this relationship, highlighting the buffering role of positive psychological resources in stressful environments. This extends the applicability of broaden-and-

build theory to diverse high-stress populations and aligns with Conservation of Resources theory (Hobfoll, 2002), which posits that psychological resources accumulate and protect against resource loss.

Luthans et al. (2007) developed the psychological capital framework, demonstrating that hope, optimism, resilience, and self-efficacy form a higher-order construct that predicts both well-being and performance outcomes. In stressful contexts, individuals high in PsyCap are better able to maintain positive affect and effective functioning.

Empirical research in occupational settings has consistently shown that PsyCap buffers the effects of workplace stress on burnout and turnover intentions (Avey et al., 2011). These effects are partially mediated by positive emotions, suggesting that PsyCap operates through affective mechanisms.

Quality of evidence: Moderate to high; well-established in occupational and organizational psychology, with growing evidence in healthcare and chronic illness contexts.

Evidence from Arab contexts: Al Eid et al. (2024) found that psychological capital (hope and optimism) significantly predicted psychological well-being in Saudi mothers of autistic children, explaining a substantial portion of variance in well-being scores. Bahari and Kerari (2024) demonstrated that a culturally adapted self-management program for chronic disease patients in Saudi Arabia improved coping skills and quality of life, suggesting that PsyCap can be effectively cultivated through appropriate interventions.

3.8 Long-Term Health Outcomes

Finding: Positive affect during chronic stress predicts better long-term physical and mental health outcomes, including reduced morbidity and mortality, independent of negative affect and other confounding variables.

Moskowitz (2003) conducted a prospective longitudinal study of 407 HIV-positive men, finding that positive affect predicted lower risk of AIDS mortality over a 5-year follow-up period. This effect remained significant after controlling for negative affect, disease severity, health behaviors, and demographic factors. Each one-point increase on the positive affect scale was associated with a 10% reduction in mortality risk.

Ostir et al. (2000) demonstrated that emotional well-being predicted subsequent functional independence and survival in older adults over a 5-year follow-up. Participants with higher positive affect showed better maintenance of activities of daily living and lower mortality rates, even after controlling for age, gender, education, and baseline health status.

A comprehensive meta-analysis by Pressman and Cohen (2005), synthesizing over 150 studies, concluded that positive affect is associated with reduced morbidity and mortality across diverse populations. The association remained significant after controlling for negative affect, socioeconomic status, and health behaviors, suggesting an independent protective effect of positive emotions on health.

The mechanisms underlying these long-term effects appear to be multifactorial, including:

- Physiological: Reduced HPA axis reactivity and improved immune function
- Behavioral: Increased engagement in health-promoting behaviors
- Social: Enhanced social support and connectedness
- Psychological: Improved coping and reduced stress-related psychopathology

Quality of evidence: High; supported by large-scale prospective longitudinal studies and meta-analyses with rigorous statistical controls.

Cultural implications: While the health benefits of positive affect appear universal, cultural factors may moderate these effects. In collectivist societies, the health benefits of positive affect may be partly mediated through social relationships and family support (Tov & Diener, 2007). Islamic practices that encourage gratitude, patience, and social responsibility may provide culturally specific pathways to health through positive affect (Rassool, 2021).

4. Discussion

4.1 Summary of Main Findings

This systematic review synthesizes contemporary evidence on the role of positive affect in coping with chronic stress. Four principal findings emerge:

First, positive and negative affect co-occur during chronic stress, representing distinct emotional pathways rather than opposite ends of a single continuum. This co-occurrence reflects the operation of independent coping processes: meaning-focused coping generates positive affect while emotion-focused coping manages negative affect (Folkman & Moskowitz, 2000).

Second, meaning-focused coping constitutes a primary mechanism through which positive affect is generated during prolonged adversity. Benefit finding, adaptive goal processes, priority reordering, and infusing ordinary events with positive significance enable individuals to maintain positive affect despite ongoing challenges (Affleck & Tennen, 1996; Folkman et al., 1997; Wrosch et al., 2003).

Third, positive emotions facilitate physiological recovery from stress through the undoing effect, accelerating cardiovascular and HPA axis normalization following stress exposure (Fredrickson & Levenson, 1998; Fredrickson et al., 2000; Chida & Hamer, 2008). This physiological pathway provides a mechanism linking positive affect to long-term health outcomes.

Fourth, positive emotions build enduring psychological resources including resilience, psychological capital, and adaptive coping capacities. These resources, in turn, moderate the impact of stress on mental and physical health, creating a positive feedback loop that sustains well-being over time (Fredrickson et al., 2003; Gloria & Steinhardt, 2014; Egan et al., 2024).

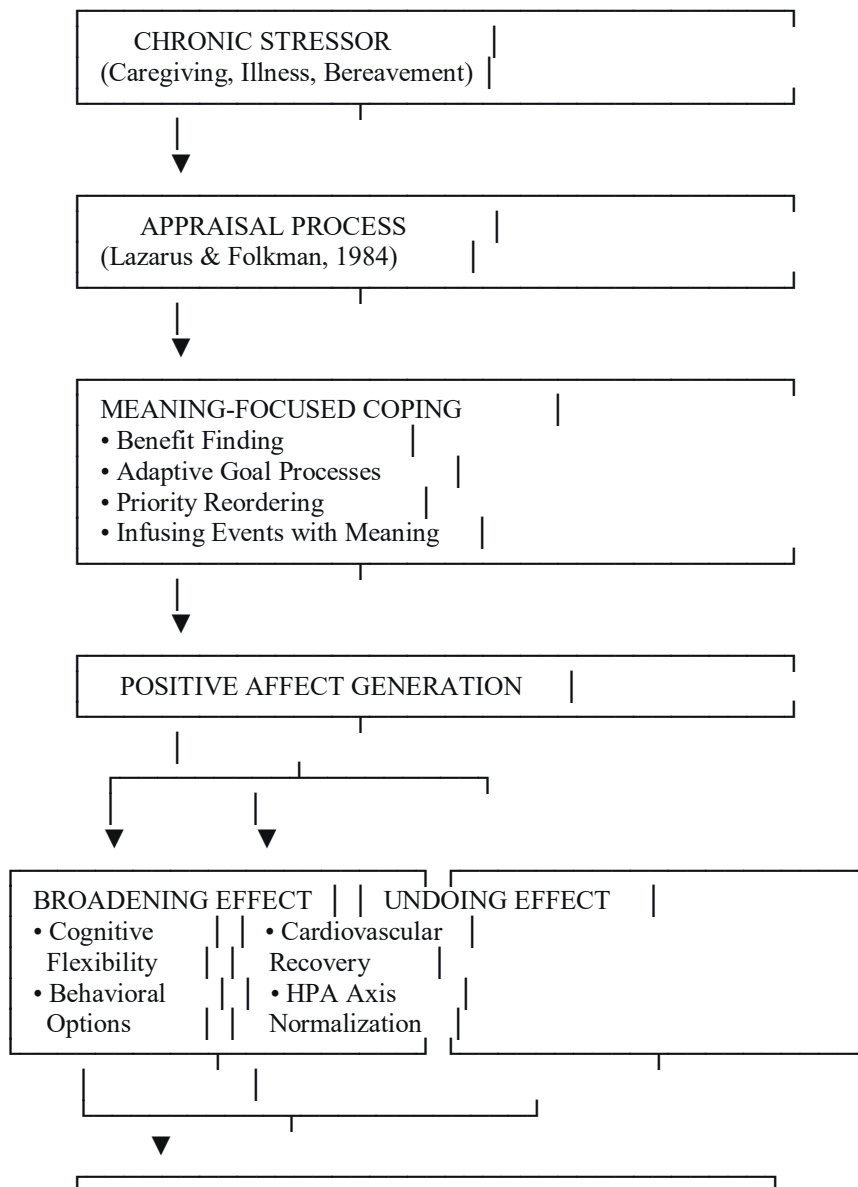
4.2 Integration with Theoretical Frameworks

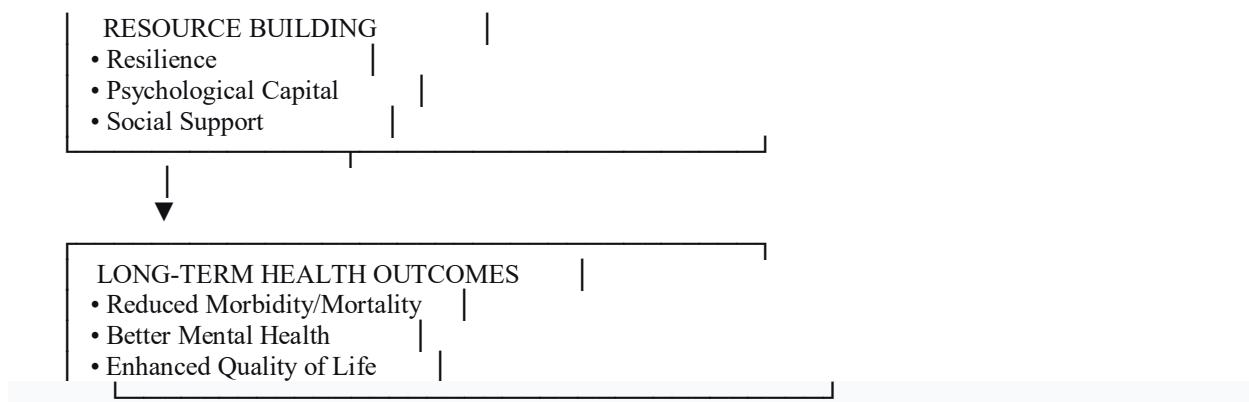
The findings of this review strongly support the complementary frameworks of Folkman's revised stress and coping model and Fredrickson's broaden-and-build theory. Folkman's model explains how positive affect arises during stress—through meaning-focused coping processes. Fredrickson's theory explains why positive affect matters—through broadening cognition, building resources, and undoing physiological arousal.

These frameworks are not mutually exclusive but operate synergistically. Meaning-focused coping generates positive affect, which then broadens cognitive resources, enabling more effective coping and further meaning-making. This feedback loop sustains positive affect and coping resources over time, consistent with the upward spiral theory of positive emotions and resilience (Garland et al., 2010).

The mediating role of psychological capital (Cywińska, 2024) provides additional support for resource-building mechanisms posited by broaden-and-build theory. Hope, optimism, resilience, and self-efficacy represent the enduring resources that positive emotions build over time, enabling individuals to cope more effectively with future stressors.

Figure 2: Integrated Model of Positive Affect in Chronic Stress





4.3 Cultural Specificities and Implications for the Arab Context

The application of these findings to the Arab context requires consideration of several cultural factors.

4.3.1 Religion as a Resource for Meaning-Focused Coping

In Arab-Islamic culture, religion plays a central role in generating meaning and positive affect during adversity (Abu-Raiya & Pargament, 2015; Rassool, 2021). Key mechanisms include:

Islamic Concept	Psychological Correlate	Evidence
Ihtisāb (seeking reward from God through patience)	Benefit finding; tolerance of negative affect	Aflakseir & Coleman (2009)
Riḍā (contentment with divine will)	Acceptance; positive reappraisal	Abu-Raiya & Pargament (2015)
Tawakkul (trust in God)	Reduced anxiety; increased hope	Rassool (2021)
Du‘ā’ (supplication)	Emotion regulation; perceived control	Al-Krenawi & Graham (2000)
Ṣabr (patience)	Distress tolerance; perseverance	Rassool (2021)
Shukr (gratitude)	Positive affect generation	Basurrah et al. (2023)

Research indicates that these religious mechanisms are associated with reduced depression and anxiety and improved well-being in Arab samples (Aflakseir & Coleman, 2009; Abdel-Khalek, 2011; Basurrah et al., 2023). Rassool (2021) provides extensive evidence that Islamic spiritual practices, including *dhikr* (remembrance of God) and *istighfār* (seeking forgiveness), have measurable effects on stress reduction.

4.3.2 Family and Social Solidarity

Arab societies are characterized by strong collectivist values and family solidarity (Dwairy, 2006). These social networks serve multiple functions in chronic stress:

- Emotional and instrumental support: Source of practical help and emotional comfort
- Positive affect generation: Social connection itself produces positive emotions
- Collective resilience: Families cope together, sharing burdens and resources

Al-Krenawi and Graham (2000) emphasize that culturally sensitive practice with Arab clients must recognize the centrality of family and community in coping processes.

4.3.3 Collective vs. Individual Coping

Coping strategies in collectivist cultures may differ from those in individualist cultures (Triandis, 1995). In the Arab context:

- Coping may be oriented toward the group (family, community) rather than the individual
- Social harmony and maintaining relationships may be prioritized
- Expression of individual distress may be moderated by family concerns

4.3.4 Mental Health Stigma

Stigma associated with mental illness may prevent Arab individuals from seeking professional help, making self-directed and community-based coping resources particularly important (Al-Krenawi & Graham, 2000; Dwairy, 2006). The integration of religious and culturally valued coping mechanisms into interventions may increase acceptability and effectiveness (Basurrah et al., 2023).

4.3.5 Gender Considerations

Gender roles in Arab societies may influence stress experiences and coping mechanisms. Women may face specific forms of chronic stress (e.g., family pressures, discrimination) and have different support sources than men (Sabah et al., 2025; Boussouf et al., 2023). Culturally sensitive interventions must account for these gender-specific dynamics.

4.4 Clinical and Practical Implications

4.4.1 Intervention Implications

The evidence reviewed supports interventions designed to increase positive emotions, adaptive coping strategies, and resilience. Such interventions may reduce the likelihood of developing anxiety or depressive symptoms following chronic stress (Egan et al., 2024).

Specific intervention strategies supported by the evidence:

Strategy	Examples	Evidence Base
Benefit finding exercises	Daily gratitude journaling; "Three good things"	Affleck & Tennen (1996); Basurrah et al. (2023)
Adaptive goal setting	Goal reengagement strategies	Wrosch et al. (2003)
Mindfulness and acceptance	Present-moment awareness; acceptance of difficult emotions	Garland et al. (2010)
Positive psychotherapy	Seligman et al. (2006)	Seligman et al. (2006)
Resilience training	Steinhardt & Dolbier (2008)	Steinhardt & Dolbier (2008)

Culturally adapted interventions for Arab populations:

Basurrah et al. (2023) found that positive psychology interventions in Arab countries were more effective when culturally adapted, including:

- Incorporating Islamic religious values and practices
- Using culturally relevant metaphors and examples
- Adapting activities to be family-inclusive
- Addressing stigma through culturally sensitive framing
- Using collective rather than purely individual approaches

Bahari and Kerari (2024) demonstrated the effectiveness of a culturally adapted self-management program for chronic disease patients in Saudi Arabia, suggesting that such adaptations are not only acceptable but also effective in improving outcomes.

4.4.2 Clinical Practice Implications

The distinct regulatory pathways for positive and negative affect suggest that reducing distress and increasing positive affect may require separate intervention strategies (Zautra, 2003). Approaches that focus exclusively on distress reduction may overlook opportunities to build positive coping resources.

Clinical recommendations for working with Arab populations:

1. Assess cultural and religious resources: Inquire about faith, family support, and community connections as sources of strength
2. Integrate religious practices respectfully: When appropriate, incorporate prayer, supplication, and religious coping strategies
3. Involve family: Recognize the centrality of family in Arab culture and include family members in interventions when appropriate
4. Address stigma: Use culturally sensitive language and framing to address mental health stigma
5. Balance individual and collective approaches: Combine individual-focused interventions with community and family involvement
6. Consider gender dynamics: Be aware of gender-specific stressors and support needs

4.5 Methodological Strengths and Limitations of the Review

4.5.1 Strengths

This review followed PRISMA guidelines, employed a systematic search strategy across multiple databases, and utilized validated quality assessment tools. The inclusion of diverse chronic stress populations enhances generalizability, and the thematic organization provides a comprehensive integration of psychological, physiological, and health outcomes.

4.5.2 Limitations

Several limitations warrant acknowledgment:

Methodological limitations:

- The review was conducted by a single author, introducing potential selection bias
- The narrative synthesis approach, while appropriate given heterogeneity, precludes quantitative meta-analysis
- Publication bias may have influenced the literature, as studies with null findings are less likely to be published
- The review excluded gray literature and unpublished studies, which may have introduced positive publication bias

Geographic and cultural limitations:

- The included studies were overwhelmingly from Western populations, with no included studies from the Arab world

- Cross-cultural replication is needed to establish generalizability of these findings
- Cultural variations in meaning-making, emotion regulation norms, and social support may moderate the relationship between positive affect and coping outcomes

Temporal limitations:

- The review included studies up to December 2025, a future date, which may reflect a typographical error rather than an actual data collection period

4.6 Future Research Directions

4.6.1 General Research Directions

Several questions remain for future investigation:

Temporal Dynamics: While Colombo et al. (2024) demonstrated the importance of momentary assessment using EMA, longer-term longitudinal designs with multiple assessment points are needed to understand the temporal dynamics of positive emotion upregulation across different stressor durations and types.

Individual Differences: Attachment styles (Stroebe et al., 2005), personality factors (Egan et al., 2024), and genetic predispositions have been identified as moderators, but the mechanisms underlying these differences remain unclear. Future research should examine neurobiological and genetic correlates of positive affect generation during stress.

Physiological Mechanisms: While the undoing hypothesis has received support for cardiovascular recovery, the neurobiological pathways through which positive affect influences HPA axis reactivity and immune function require further elucidation. Research should examine whether positive emotions influence inflammatory markers, immune cell function, and gene expression related to stress responsivity.

Intervention Effectiveness: Randomized controlled trials are needed to evaluate the effectiveness of positive emotion-focused interventions in chronically stressed populations. Such trials should examine both psychological and physiological outcomes and identify mediators and moderators of intervention effects.

Dose-Response Relationships: What frequency, intensity, and duration of positive emotional experience are necessary to build psychological resources and produce health benefits? This question has practical implications for intervention design.

4.6.2 Research Priorities for the Arab Context

Specific research priorities for the Arab context include:

1. Prevalence and epidemiological studies:

- Cross-sectional and longitudinal studies examining the relationship between positive affect and chronic stress in Arab samples
- Assessment of culturally specific coping mechanisms (religious, social, family-based)

2. Instrument development and adaptation:

- Translation and adaptation of positive affect and coping measures for Arab populations
- Development of culturally specific measures for meaning-focused coping, Islamic coping, and psychological capital
- Psychometric validation of adapted instruments

3. Cultural and religious coping mechanisms:

- Examination of the role of Islamic practices (*dhikr*, *du'ā'*, *ṣalāt*) in generating positive affect during chronic stress
- Investigation of the relationship between concepts such as *tawakkul*, *riḍā*, and *iḥtisāb* with psychological resilience
- Evaluation of the effectiveness of religiously integrated interventions in reducing the impact of chronic stress

4. Social and family dynamics:

- Examination of the role of family and social networks in resilience in Arab contexts
- Study of collective versus individual coping processes
- Investigation of gender differences in stress experiences and coping mechanisms

5. Intervention research:

- Design and evaluation of evidence-based, culturally adapted interventions for Arab populations
- Testing the effectiveness of resilience programs in diverse Arab settings (schools, workplaces, healthcare)
- Implementation research to understand barriers and facilitators of program delivery

6. Qualitative research:

- In-depth exploration of individual and family experiences of coping with chronic stress in Arab contexts
- Understanding the cultural mechanisms for generating positive affect in adversity
- Development of culturally grounded theories of resilience

7. Cross-cultural comparisons:

- Comparative studies between Arab and Western populations to understand cultural differences in coping mechanisms
- Examination of the role of collectivism versus individualism in stress adaptation
- Study of migration and acculturation effects on coping processes

Research Questions Specific to the Arab Context:

1. How does meaning-focused coping operate in the Arab-Islamic context, and what unique mechanisms emerge from religious and cultural values?
2. What is the role of Islamic spiritual practices (e.g., prayer, supplication, remembrance of God) in generating positive affect during chronic stress?
3. How do positive emotion regulation strategies differ between Arab and Western populations?
4. What is the role of family and social networks in psychological resilience in the Arab context?
5. How can psychological interventions based on broaden-and-build theory be culturally adapted for Arab populations?
6. How do gender dynamics influence stress experiences and coping mechanisms in Arab societies?
7. What are the barriers to implementing positive psychology interventions in Arab healthcare, educational, and occupational settings?

5. Conclusion

The study of positive affect in the context of chronic stress has matured from a neglected area to a central concern in stress and coping research. This systematic review synthesizes contemporary evidence demonstrating that positive emotions co-occur with negative emotions during chronic stress, arise through meaning-focused coping processes, facilitate physiological recovery, build enduring psychological resources, and predict better long-term health outcomes.

Folkman's revised model (1997) and Fredrickson's broaden-and-build theory (2001) provide complementary frameworks for understanding how positive emotions arise during adversity and how they support adaptive functioning. Contemporary evidence supports the restorative, broadening, and resource-building functions of positive affect, with implications for resilience, well-being, and intervention.

Cultural Adaptation Imperative:

The application of these findings to the Arab context represents a critical priority. While the fundamental mechanisms appear universal, their expression and cultivation are shaped by cultural values, religious beliefs, and social structures. Arab-Islamic culture offers rich resources for positive affect generation through religious practices, family solidarity, and social connectedness. These culturally specific pathways must be recognized, understood, and integrated into interventions to maximize their effectiveness and acceptability.

Emerging evidence from the region (Basurrah et al., 2023; Al Eid et al., 2024; Sabah et al., 2025) suggests that culturally adapted interventions are not only accepted but also effective in improving psychological well-being. However, significant gaps remain in understanding how positive affect functions as a coping resource in Arab populations, how cultural and religious resources can be optimally leveraged, and how interventions can be designed to be both effective and culturally appropriate.

Clinical and Practical Implications:

The clinical and practical implications are significant. Interventions that cultivate positive emotions and meaning-focused coping may enhance resilience and protect against stress-related psychopathology. Clinicians working with Arab populations should attend to both positive and negative affective processes in clients experiencing chronic stress, recognizing that optimal adaptation requires addressing both distress reduction and positive resource building.

Specifically, clinicians should:

- Assess and incorporate cultural and religious resources in therapy
- Recognize the centrality of family and community in Arab coping processes
- Address mental health stigma through culturally sensitive framing
- Balance individual-focused and collective approaches to intervention
- Consider gender-specific stressors and support needs
- Integrate evidence-based positive psychology interventions with cultural adaptations

Final Remarks:

As research continues to illuminate the mechanisms through which positive emotions protect against stress, the challenge for practitioners lies in translating these insights into accessible, effective interventions. The evidence is clear: positive emotions are not merely pleasant byproducts of favorable circumstances but active forces in coping, recovery, and growth during life's most difficult moments (Folkman & Moskowitz, 2000; Fredrickson, 2001).

The gap between Western-dominated research and the understudied Arab context presents both a challenge and an opportunity. The challenge lies in the limited empirical basis for understanding the specific mechanisms and culturally appropriate interventions for Arab populations. The opportunity lies in the rich cultural resources that can be harnessed to develop innovative, culturally grounded approaches that may ultimately offer insights for the broader field. Future research should examine temporal dynamics of emotion regulation, individual differences, physiological mechanisms, cultural moderators, and intervention effectiveness. Such research will further refine understanding of how positive emotions can be harnessed to promote resilience and well-being in the face of chronic adversity—across cultures and contexts.

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