

# Age-Stratified Patterns of Psychological Resilience and Self-Reconstruction: A Study of Chinese Mothers Navigating Role Stress in Quanzhou

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**Abstract:** Women aged 30–45 face intensified role-related stress from overlapping parenting, career, and family care duties. Existing research often treats middle-aged women as a homogeneous group and lacks fine-grained, localized investigations. Addressing these gaps, this study adopts an age-stratified lens to examine 373 mothers aged 30–45 with school-aged children in Quanzhou, China—a city with a strong Confucian cultural context. A descriptive quantitative design and a self-developed questionnaire with high reliability (Cronbach’s  $\alpha=0.94$ ) were used to measure role-related stress, psychological resilience (emotional regulation, adaptability, positive thinking), and self-reconstruction mechanisms (cognitive, emotional, behavioral, relational). Non-parametric tests revealed significant age-specific patterns: the 36–40 age group exhibited the highest levels of resilience ( $M=3.75$ ,  $SD=0.42$ ) and self-reconstruction ( $M=3.78$ ,  $SD=0.39$ ), while the 41–45 group reported the highest stress ( $M=3.89$ ,  $SD=0.45$ ). Kruskal-Wallis tests confirmed significant differences across age groups for role-related stress ( $\chi^2=8.76$ ,  $p=.013$ ), psychological resilience ( $\chi^2=11.24$ ,  $p=.004$ ), and self-reconstruction ( $\chi^2=12.81$ ,  $p=.002$ ). Post-hoc pairwise comparisons indicated the 36–40 group differed significantly from the 30–35 and 41–45 groups ( $p<.05$ ). A strong positive correlation was found between resilience and self-reconstruction (Spearman’s  $\rho=0.76$ ,  $p<.001$ ). This research provides empirical evidence on the diversity and dynamics of psychological adaptation among middle-aged Chinese women, underscoring the critical need to incorporate developmental stage and local cultural context into the design of mental health interventions. The findings enrich the cross-cultural application of resilience theory and inform the development of localized support strategies for specific female populations.

**Keywords:** Role-related stress, Psychological resilience, Self-reconstruction, Middle-aged women, Quanzhou.

## 1. Introduction

Contemporary women navigate intensified role-related stress at the intersection of family, career, and social expectations. This is particularly acute for those aged 30–45, who are often managing career advancement, school-aged child-rearing, and intergenerational caregiving duties. Psychological resilience—the capacity to adapt and recover from adversity—and self-reconstruction mechanisms—the processes of reshaping identity and coping systems post-stress—are critical for sustaining their well-being.

However, the existing literature presents limitations. First, a predominant tendency to treat “middle-aged women” as a monolithic category obscures nuanced, intra-group differences across narrower developmental stages. Second, there is a scarcity of localized research in specific Chinese cultural contexts like Quanzhou, where Confucian collectivism, filial piety norms, and traditional gender roles uniquely shape women’s stress experiences and coping arsenals. Third, while prior studies acknowledge age as a factor, few adopt a five-year stratified analysis to capture developmental shifts in resilience and self-reconstruction. This study aims to bridge these gaps by investigating mothers aged 30–45 in Quanzhou, exploring their role stress, age-stratified resilience patterns, and self-reconstruction mechanisms. The research objectives are to: (1) assess levels of role-related stress, psychological resilience, and self-reconstruction; (2) identify age-based differences in these variables; (3) examine the correlation between resilience and self-reconstruction; (4) propose targeted, context-sensitive intervention pathways.

## 2. Literature Review

### 2.1. Role-Related Stress Among Middle-Aged Women

Role-related stress arises from incompatible demands across multiple social roles. In China, rapid socioeconomic change and a competitive educational landscape have significantly amplified stress for mothers of school-aged children. For women in cities like Quanzhou, this is compounded by the pressure to balance traditional caregiving expectations with modern labor force participation. Crucially, the nature of this stress varies with age: younger mothers (30–35) often grapple with identity transitions into motherhood and career, while older mothers (41–45) increasingly face the overlapping pressures of child-rearing and elder care—a “sandwich generation” dilemma [1]. Despite this, research that systematically examines stress across five-year age strata within the 30–45 cohort remains scarce.

### 2.2. Psychological Resilience in Women Under Stress

Resilience is a dynamic process entailing emotional regulation, adaptive coping, and positive reframing. For women, it is shaped by an interplay of internal strengths (e.g., cognitive flexibility) and external supports. Age-related variations exist: Wang and Zhang [2] found that 30–35-year-old Chinese women’s resilience is mediated by emotional regulation amid work-family conflict, while Kim and Park [4] noted 41–45-year-old women rely on cognitive flexibility to cope with midlife role changes. However, a detailed mapping

of resilience across early to mid-adulthood stages in non-Western contexts is lacking.

### 2.3. Self-Reconstruction Mechanisms

Self-reconstruction involves cognitive, emotional, behavioral, and relational adjustments following significant stress narrative identity theory explains this process as rewriting life stories to redefine self-worth, particularly relevant for midlife women navigating role transitions. In East Asian cultures, this process is often influenced by values emphasizing endurance, harmony, and relational interdependence [9]. Alshowkan et al. [3] noted younger mothers rely on external support, while older mothers use introspection, but how these mechanisms manifest across specific age groups within midlife remains underexplored.

### 2.4. Relationship Between Resilience and Self-Reconstruction

Theoretical models posit a synergistic relationship where resilience provides the foundational resources for initiating self-reconstruction, while successful reconstruction consolidates and strengthens long-term resilience [5]. Empirical validation of this dynamic, especially among Chinese mothers and across different age bands, is limited. Merida et al. [7] found a positive correlation between resilience and coping strategies in working mothers, but age-stratified analyses are absent.

## 3. Theoretical Framework

This study is anchored in an integrated theoretical framework combining four core theories:

(1) Resilience Theory: Conceptualizes resilience as a dynamic interaction between stressors and protective factors (internal: emotional regulation, cognitive flexibility; external: family support), guiding the analysis of age-specific resilience patterns.

(2) Role Theory: Explains how conflicting societal role expectations (mother, worker, caregiver) generate stress, framing the study's focus on role-related stress [6].

(3) Narrative Identity Theory: Illuminates self-reconstruction as a process of rewriting life narratives, particularly relevant for understanding how women redefine identity across midlife stages.

(4) Identity Development Theory: Highlights midlife's "generativity vs. stagnation" conflict, providing a developmental lens for age-stratified differences in self-reconstruction.

We propose that the pathway from role stress to psychological adaptation (resilience and self-reconstruction) is moderated by two factors: (1) developmental stage (age stratification, which influences life tasks and resource accumulation); (2) socio-cultural context (Quanzhou's Confucian norms, emphasizing family harmony and filial piety). This framework investigates "for whom and under what conditions" these processes are most effective, guiding the analysis of age-based differences and cultural inflections in coping strategies.

Role-Related Stress (Caregiving, Work, Family) → Moderators: Age Stratification (30–35, 36–40, 41–45) & Quanzhou Cultural Context (Confucianism, Filial Piety) → Psychological Resilience (Emotional Regulation, Adaptability, Positive Thinking) ↔ Self-Reconstruction Mechanisms (Cognitive, Emotional, Behavioral, Relational)

→ Mental Well-Being

## 4. Methodology

### 4.1. Research Design

A descriptive quantitative cross-sectional design was employed to measure variables and examine relationships without manipulation [10].

### 4.2. Participants and Sampling

The target population was mothers aged 30–45, permanently residing in Quanzhou, China, with at least one school-aged child (6–15 years). Exclusion criteria were age outside the range or having no school-aged children. Based on a population estimate of 12,500 eligible mothers, a minimum sample size of 373 was calculated using the Raosoft Sample Size Calculator (95% confidence level, 5% margin of error). Stratified purposive sampling ensured equal representation from three age groups: 30–35 (n=124, 33.2%), 36–40 (n=129, 34.6%), and 41–45 (n=120, 32.2%).

### 4.3. Instrument

A self-developed questionnaire was used, comprising four sections:

(1) Demographic Profile: Captured age, marital status, education, employment, and caregiving characteristics.

(2) Role-Related Stress Scale (10 items): Assessed stress from multiple roles (e.g., "I feel stressed when balancing work and family"). Cronbach's  $\alpha=0.87$  (good reliability).

(3) Psychological Resilience Scale (12 items, 3 dimensions): Emotional regulation, adaptability, positive thinking (e.g., "I recover quickly after stressful events"). Cronbach's  $\alpha=0.91$  (excellent reliability).

(4) Self-Reconstruction Mechanisms Scale (20 items, 4 dimensions): Cognitive, emotional, behavioral, relational reconstruction (e.g., "I change how I think about problems to reduce stress"). Cronbach's  $\alpha=0.94$  (excellent reliability).

All items used a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree).

### 4.4. Cultural Adaptation of Instrument

To ensure contextual validity for Quanzhou mothers:

(1) Translation and back-translation by bilingual psychology researchers.

(2) Cultural contextualization review by three local experts (psychology, sociology) to align items with local norms (e.g., rephrasing "social support" as "family and community support").

(3) Pilot testing (n=30) to refine clarity, with no items discarded (content validity index CVI=0.92).

### 4.5. Data Collection and Analysis

Data were collected online (Google Forms via WeChat) and offline (printed questionnaires) over two months. A total of 402 responses were received, with 29 excluded for incomplete data (response rate=92.8%). SPSS 26.0 was used for analysis:

- Descriptive statistics (frequency, weighted mean, SD) for sample characteristics and variable levels.

- Shapiro-Wilk test ( $p<.05$ ) confirmed non-normal distribution, so non-parametric tests were used.

- Kruskal-Wallis H test to compare variables across age groups, with post-hoc Mann-Whitney U tests.

- Spearman's rho to examine the correlation between

resilience and self-reconstruction.

- Harman’s single-factor test: First factor accounted for 28.7% of variance (<40%), indicating no severe common method bias.

## 4.6. Ethical Considerations

Informed consent was obtained electronically/writtenly. Anonymity was guaranteed (no identifying information collected), and data were stored securely (password-protected files, locked cabinets). Support service contacts were provided for participants experiencing distress.

## 5. Results

### 5.1. Sample Characteristics

Most participants were married (92.2%), held a college degree (68.1%), were full-time employed (45.6%), had 1–2 children (89.3%), and were the primary caregiver (76.4%). Average weekly working hours (for employed participants) were 40–49 hours (38.2%).

### 5.2. Levels of Key Variables

(Weighted Mean  $\pm$  SD)

Variable Overall (n=373) 30–35 (n=124) 36–40 (n=129) 41–45 (n=120)

Role-Related Stress 3.72  $\pm$  0.58 3.67  $\pm$  0.56 3.58  $\pm$  0.59 3.89  $\pm$  0.54

Psychological Resilience 3.58  $\pm$  0.61 3.48  $\pm$  0.63 3.75  $\pm$  0.57 3.51  $\pm$  0.60

Self-Reconstruction Mechanisms 3.61  $\pm$  0.59 3.49  $\pm$  0.62 3.78  $\pm$  0.55 3.52  $\pm$  0.58

— Cognitive Reconstruction 3.57  $\pm$  0.64 3.45  $\pm$  0.66 3.73  $\pm$  0.60 3.49  $\pm$  0.63

— Emotional Reconstruction 3.59  $\pm$  0.62 3.47  $\pm$  0.65 3.76  $\pm$  0.58 3.51  $\pm$  0.61

— Behavioral Reconstruction 3.63  $\pm$  0.60 3.50  $\pm$  0.63 3.80  $\pm$  0.54 3.53  $\pm$  0.59

— Relational Reconstruction 3.73  $\pm$  0.57 3.64  $\pm$  0.59 3.83  $\pm$  0.53 3.70  $\pm$  0.56

### 5.3. Age-Based Differences

Variable H Value df p Value Post-Hoc Comparisons ( $p < .05$ )

Role-Related Stress 8.76 2 .013 36–40 < 41–45

Psychological Resilience 11.24 2 .004 30–35 < 36–40; 41–45 < 36–40

Self-Reconstruction Mechanisms 12.81 2 .002 30–35 < 36–40; 41–45 < 36–40

— Cognitive Reconstruction 9.63 2 .008 30–35 < 36–40

— Emotional Reconstruction 10.17 2 .006 30–35 < 36–40; 41–45 < 36–40

— Behavioral Reconstruction 11.59 2 .003 30–35 < 36–40; 41–45 < 36–40

— Relational Reconstruction 7.82 2 .020 30–35 < 36–40

### 5.4. Correlation Between Resilience and Self-Reconstruction

A strong, significant positive correlation was found between psychological resilience and self-reconstruction mechanisms ( $r_s = 0.76, p < .001$ ). All resilience dimensions correlated positively with self-reconstruction subscales ( $r_s$  range: 0.68–0.81,  $p < .001$ ).

## 6. Discussion

### 6.1. Interpretation of Age-Stratified Findings

The results reveal distinct developmental patterns:

- 36–40 age group: Highest resilience and self-reconstruction scores. This “resilience peak” aligns with Chen and Li’s (2023) finding that women in this stage have consolidated parenting and career experience, stabilized support networks, and mastered adaptive coping strategies.

- 30–35 age group: Lowest resilience and self-reconstruction. As Wang and Zhang [2] noted, this group is in early role transition (career establishment + new motherhood), with coping resources still developing, leading to greater stress vulnerability.

- 41–45 age group: Highest role-related stress, moderate resilience. This reflects the “sandwich generation” burden (child-rearing + elder care; Ahmad et al. [1]), where dual caregiving demands deplete protective resources despite emotional maturity.

### 6.2. The Primacy of Relational Reconstruction in Cultural Context

Relational reconstruction was the strongest self-reconstruction dimension across all age groups (overall  $M=3.73$ ). This aligns with Quanzhou’s Confucian cultural context, where family and relational harmony are core values [11]. For these mothers, negotiating family relationships (e.g., seeking spousal support, setting caregiving boundaries) is not just a coping tactic but a culturally sanctioned pathway to self-reconstruction—supporting Walsh’s [8] family resilience theory.

### 6.3. The Synergy Between Resilience and Self-Reconstruction

The strong correlation ( $r_s=0.76$ ) supports a mutual reinforcement model: resilience provides emotional/cognitive resources to engage in self-reconstruction (e.g., cognitive reframing), while successful reconstruction enhances self-efficacy and positive thinking, strengthening resilience (Bonanno et al., [5]). This aligns with Troy et al.’s [12] affect-regulation framework, which positions resilience as a foundation for adaptive change.

### 6.4. Theoretical and Practical Implications

- Theoretical: Integrates Luthar’s resilience dynamic model, McAdams’ narrative identity theory, and Erikson’s developmental theory to explain age-stratified adaptation, extending cross-cultural applications of resilience research.

- Practical: Advocates for age-tailored interventions:

- 30–35 years: Emotion regulation training and role-negotiation workshops (e.g., setting work-family boundaries).

- 36–40 years: Peer support groups to share successful coping strategies, reinforcing existing resilience.

- 41–45 years: Systemic interventions (e.g., family caregiving responsibility dialogues, community elder care services) to reduce “sandwich generation” stress.

## 7. Limitations and Future Directions

This study has limitations: (1) Cross-sectional design precludes causal inference; (2) Self-reported data may be subject to social desirability bias; (3) Sample is limited to Quanzhou, reducing generalizability to other Chinese regions; (4) Key covariates (e.g., spousal involvement, socioeconomic

status) were not measured in detail.

Future research should: (1) Use longitudinal designs to track resilience-self-reconstruction dynamics over time; (2) Adopt mixed methods (surveys + interviews) to capture lived experiences; (3) Conduct cross-regional comparisons to disentangle universal vs. culture-specific mechanisms; (4) Design and evaluate age-tailored, family-engaged interventions based on these findings.

## 8. Conclusion

This study provides compelling evidence that the psychological adaptation of mothers aged 30–45 in Quanzhou is neither uniform nor static. It follows distinct age-stratified patterns—with a resilience peak at 36–40 years and elevated stress among the 41–45 “sandwich generation”—and is deeply shaped by local Confucian norms that prioritize relational harmony. The strong link between resilience and self-reconstruction highlights a core mechanism for positive adaptation. By integrating developmental and cultural lenses, this research offers a nuanced blueprint for promoting the mental well-being of women navigating multiple roles, advocating for support strategies that are as specific and dynamic as the lives they aim to improve.

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