



Socio-Demographic Factors Predicting Perceived Stress and Psychological Well-Being Among Orphan Adolescents: A Narrative Review

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Abstract: Adolescents residing in orphan constitute a psychologically vulnerable population due to cumulative adversities such as parental loss, early trauma, disrupted attachment, and prolonged institutional care. Perceived stress and psychological well-being are critical mental health indicators during adolescence, yet limited consolidated evidence exists on how socio-demographic factors influence these outcomes among institutionalized youth. The present narrative review synthesizes empirical findings and theoretical perspectives examining socio-demographic predictors of perceived stress and psychological well-being among orphan adolescents. Drawing upon ecological and transactional stress frameworks, the review highlights the role of age, gender, type of orphanhood, duration of institutionalization, educational status, and socioeconomic background in shaping adolescents' stress appraisal and well-being. Findings indicate that older age, female gender, double orphanhood, prolonged institutionalization, and poor educational engagement are consistently associated with higher perceived stress and poorer psychological well-being. Protective factors such as educational support, caregiver responsiveness, and positive institutional climate are also discussed.

Keywords: Orphan adolescents, perceived stress, psychological well-being, socio-demographic factors, institutional care.

I. INTRODUCTION

Adolescence is a critical developmental phase marked by rapid biological maturation, cognitive restructuring, heightened emotional sensitivity, and expanding social roles. This period represents a window of both vulnerability and opportunity, during which mental health trajectories are strongly shaped (Patton et al., 2016; Sawyer et al., 2018). Chronic psychosocial stressors during adolescence significantly increases the risk for long-term emotional and psychological difficulties, particularly among socially marginalized populations (McLaughlin, 2016; WHO, 2021). Neurodevelopmental evidence further indicates that ongoing maturation of brain regions involved in emotion regulation, executive functioning, and stress processing makes adolescents especially sensitive to adverse environments (Blakemore, 2018; Tottenham & Galván, 2016).

Within this broader developmental vulnerability, orphan adolescents represent a particularly high-risk group. Experiences of parental loss, abandonment, neglect, poverty, and disrupted caregiving place these adolescents at elevated risk for emotional dysregulation, heightened stress reactivity, and compromised psychological well-being (Sharma & Chaudhary, 2019; UNICEF, 2023). Studies has consistently demonstrated that early adversity associated with orphanhood interferes with normative socio-emotional development and adaptive stress regulation (Tottenham, 2015; van IJendoorn et al., 2020).

The psychological vulnerability of orphan adolescents is further intensified when they grow up in institutional care settings. Orphanages are often characterized by high child-to-caregiver ratios, rigid routines, limited individualized attention, and emotionally constrained caregiving environments. Longitudinal and cross-cultural research indicates that prolonged institutionalization disrupts attachment security, reduces opportunities for emotional expression, and limits the development of effective coping strategies (van IJendoorn et al., 2020; McLaughlin et al., 2021). These institutional characteristics compound early-life adversity, amplifying psychological risk during adolescence.

A key mechanism through which these risks manifest is perceived stress, defined as the extent to which individuals appraise life situations as overwhelming, unpredictable, or uncontrollable (Cohen et al., 1983). Contemporary stress research emphasizes that perceived stress, rather than objective stress exposure alone, plays a central role in shaping adolescents' emotional and behavioral outcomes (Taylor & Stanton, 2021; Compas et al., 2017). Among orphanage adolescents, perceived stress is commonly

heightened by limited emotional support, restricted autonomy, academic pressure, social stigma, and uncertainty regarding future educational and vocational prospects (Singh et al., 2021; UNICEF, 2023). Empirical evidence shows higher perceived stress levels among institutionalized adolescents compared to those in family-based care (Humphreys et al., 2017).

Psychological well-being, as conceptualized in contemporary positive psychology frameworks, extends beyond the absence of psychopathology to include positive functioning, emotional balance, purpose in life, autonomy, environmental mastery, and positive interpersonal relationships (Ryff, 2018). Adolescents exposed to early deprivation and prolonged institutional care frequently report lower psychological well-being, including reduced self-esteem, impaired emotional regulation, and difficulties in forming secure relationships (Humphreys et al., 2017; Masten & Barnes, 2018). However, substantial heterogeneity in outcomes has been observed, suggesting the influence of socio-demographic and contextual factors that may either exacerbate vulnerability or promote resilience.

Guided by Bronfenbrenner's Ecological Systems Theory, recent research emphasizes that adolescent mental health is shaped by the dynamic interaction of individual characteristics, institutional environments, educational systems, and broader sociocultural contexts (Bronfenbrenner & Morris, 2006). Within this socio-ecological framework, socio-demographic factors such as age, gender, type of orphanhood, duration of institutionalization, educational status, and socioeconomic background emerge as critical determinants of perceived stress and psychological well-being (Chaudhary & Sharma, 2019; Singh et al., 2021; WHO, 2022). Complementing this perspective, the Transactional Model of Stress and Coping highlights how socio-demographic contexts shape cognitive appraisal processes, coping resources, and emotional outcomes over time (Lazarus & Folkman, 1984; Compass et al., 2017).

Empirical studies have demonstrated that older adolescents experience higher stress due to academic pressures and transition-related anxieties, while female adolescents consistently report greater emotional distress and lower psychological well-being compared to males (Kaur & Sharma, 2020; Patel et al., 2022). Double orphanhood and prolonged institutional stays are associated with heightened perceived stress, emotional numbing, and reduced self-efficacy (van IJzendoorn et al., 2020; UNICEF, 2023). Conversely, educational engagement and academic support function as protective factors, enhancing self-worth, optimism, and future orientation (Masten & Barnes, 2018; Kaur & Sharma, 2020).

Additional systemic challenges, including overcrowded institutions, limited access to mental health professionals, educational inequality, and persistent cultural stigma surrounding orphanhood is also well recorded (Singh et al., 2021; Ministry of Women and Child Development, 2022). Although recent policy initiatives emphasize child protection and psychosocial care, empirical findings on socio-demographic predictors of perceived stress and psychological well-being among orphanage adolescents remain fragmented and methodologically diverse.

Therefore, there is a clear need for a comprehensive synthesis of existing evidence. The present review systematically examines research published between 2015 and 2025 to explore how socio-demographic factors influence perceived stress and psychological well-being among institutionalized orphan adolescents. By integrating contemporary empirical findings with socio-ecological and stress-coping frameworks, this review aims to identify key risk and protective factors, address gaps in the literature, and inform evidence-based interventions and policy initiatives aimed at improving mental health outcomes for this vulnerable population.

II METHOD

2.1 STUDY DESIGN

The present study adopted a narrative review methodology to synthesize existing empirical and theoretical literature on socio-demographic factors predicting perceived stress and psychological well-being among orphanage adolescents. A narrative review was considered appropriate to integrate findings across diverse study designs, populations, and conceptual frameworks, and to provide a comprehensive understanding of the topic.

2.2 SEARCH STRATEGY

The literature search was conducted using combinations of the following keywords: orphanage adolescents, institutionalized adolescents, perceived stress, psychological well-being, socio-demographic factors, mental health, and institutional care. Boolean operators such as 'and' and 'or' were used to refine the search results. Relevant literature was identified through systematic searches of the following electronic databases like Google Scholar, PubMed, ResearchGate, and ScienceDirect. Additionally, reference lists of selected articles and reports from international organizations were manually screened to identify further relevant studies.

The inclusion criteria for the studies are, Studies published between 2015 and 2025, focusing on orphanage or institutionalized adolescents and examining perceived stress, psychological well-being, or related psychological outcomes. Also, empirical studies, review articles, and theoretical papers published in English were only included. Studies focusing exclusively on adults or non-institutionalized populations, articles unrelated to mental health or socio-demographic variables and studies lacking theoretical or empirical relevance to the review objectives were not included for reviewing in the present study.

2.3 STUDY SELECTION

Approximately 120 articles were initially identified through database searches. After screening titles, abstracts, and full texts for relevance, studies meeting the inclusion criteria were selected and included for the synthesis.

2.4 DATA EXTRACTION AND SYNTHESIS

Findings from selected studies were analyzed qualitatively and organized thematically under major socio-demographic variables, including age, gender, type of orphanhood, duration of institutionalization, educational status, and socioeconomic background. Key information such as study objectives, sample characteristics, socio-demographic variables, psychological outcomes, and major findings was extracted and systematically reviewed. The synthesis was guided by Bronfenbrenner's Ecological Systems Theory and Lazarus and Folkman's Transactional Model of Stress and Coping, enabling integration of individual and environmental perspectives.

III RESULT AND DISCUSSION

The present review synthesizes empirical findings that focused on examining the relationship between socio-demographic factors, perceived stress, and psychological well-being among orphan adolescents, with particular emphasis on age and gender. Overall, the literature indicates that socio-demographic characteristics function both as risk and protective variables, influencing stress appraisal and well-being through complex developmental and contextual pathways.

3.1 ROLE OF AGE ON PERCEIVED STRESS AND WELLBEING AMONG ORPHAN ADOLESCENTS

Across recent studies, age consistently shows a positive relationship with perceived stress, particularly during late adolescence. Several studies report that older adolescents experience higher stress levels due to increased academic pressure, identity exploration, future uncertainty, and transition-related anxiety (Chaudhary & Sharma, 2019; Singh et al., 2021). Late adolescence is marked by heightened cognitive awareness of life stressors, which intensifies stress appraisal. However, not all studies report a linear relationship. Some longitudinal and cross-sectional studies suggest that older adolescents may demonstrate better emotional regulation and adaptive coping, resulting in lower perceived stress when adequate social and institutional support is present (Masten, 2018; Patra & Sarkar, 2020). This contradictory evidence highlights that age alone does not determine stress outcomes; rather, its impact is moderated by contextual supports such as educational engagement and caregiver responsiveness. Thus, age functions as a conditional predictor, reinforcing transactional models of stress.

Recent studies indicate that psychological well-being tends to decline with increasing age during adolescence, especially in institutionalized populations (Patra & Sarkar, 2020). Older adolescents often report lower autonomy, reduced optimism, and diminished life satisfaction, largely due to uncertainty about independent living and social reintegration. In contrast, some evidence suggests that older adolescents may exhibit greater psychological maturity and meaning-making abilities, contributing to stable or even improved well-being in supportive environments (Masten, 2018). These inconsistent findings underscore the importance of examining age in interaction with institutional quality rather than as an isolated variable.

3.2 ROLE OF GENDER ON PERCEIVED STRESS AND WELLBEING AMONG ORPHAN ADOLESCENTS

Gender differences in perceived stress remain a prominent and consistent finding in studies. A substantial body of evidence indicates that female adolescents report significantly higher perceived stress compared to males (Singh et al., 2021; WHO, 2022). This elevated stress among females has been attributed to emotional socialization patterns, greater internalization of stress, gender-based expectations, and vulnerability to interpersonal stressors. Conversely, a few studies challenge this assumption by reporting no significant gender differences in perceived stress, particularly in highly structured institutional environments where daily routines and responsibilities are uniform (Kumar & Rajkumar, 2017). Some researchers argue that males may underreport stress due to social desirability and masculine norms, leading to an apparent gender gap rather than a real psychological difference (Thoits, 2018). These mixed findings suggest that gender influences stress expression more than stress exposure per se.

Gender differences are also evident in psychological well-being outcomes. Several studies report lower psychological well-being among female adolescents, particularly in dimensions related to autonomy and emotional balance (Singh et al., 2021; WHO, 2022). Cultural constraints and limited decision-making opportunities are frequently cited as contributing factors. However, some studies report better relational well-being and emotional awareness among females, suggesting that females may excel in interpersonal dimensions of well-being despite higher emotional distress (Sharma & Joshi, 2019). Meanwhile, males often display higher autonomy but poorer emotional expression, resulting in mixed well-being profiles. These findings indicate that gender differences in well-being are domain-specific rather than global.

3.3 INTERACTION OF AGE AND GENDER ON STRESS AND WELLBEING

Emerging evidence from studies published after 2020 highlights the interactive effect of age and gender on psychological outcomes. Older female adolescents consistently exhibit the highest levels of perceived stress and the poorest psychological well-being. (Orben et al., 2020; Blakemore & Mills, 2014) whereas younger males tend to report the most favorable outcomes (Hankin & Abramson, 2001; Compas et al., 2017). This interaction underscores the importance of adopting a developmentally and gender-sensitive framework when assessing adolescent mental health (Blakemore & Mills, 2014). Transactional stress models suggest that age-related increases in environmental demands interact with gender-specific coping styles, amplifying vulnerability among adolescent girls (Compas et al., 2017; Thoits, 2010). Furthermore, ecological sociocultural perspectives emphasize that institutional, educational, and cultural contexts may intensify or mitigate these vulnerabilities depending on age and gender (Rudolph, 2008; Orben et al., 2020).

3.4 RELATIONSHIP BETWEEN PERCEIVED STRESS AND PSYCHOLOGICAL WELL-BEING

Research consistently demonstrates a significant inverse relationship between perceived stress and psychological well-being among orphan adolescents. Orphaned youth experience elevated stress due to cumulative adversities such as parental loss, institutional living conditions, social stigma, economic hardship, and limited emotional support, all of which place them at heightened risk for compromised psychological functioning (Cluver et al., 2013; Shiferaw et al., 2018). Empirical studies conducted in orphanage and community-care settings indicate that higher perceived stress is associated with lower levels of psychological well-being, including reduced self-acceptance, environmental mastery, autonomy, and purpose in life (Atwine et al., 2015; Kumar & Devi, 2018). Compared to non-orphan adolescents, orphans consistently report higher stress levels and poorer well-being outcomes, particularly in institutional contexts where caregiver consistency and emotional bonding are limited (Betancourt et al., 2017; Kaur & Rani, 2020).

However, evidence also suggests that the negative impact of perceived stress on psychological well-being among orphan adolescents is moderated by protective factors. Studies highlight the buffering roles of resilience, adaptive coping strategies, and perceived social support from caregivers, peers, and institutional staff, which can help orphan adolescents maintain moderate levels of well-being despite high stress exposure (Masten & Barnes, 2018; Ungar, 2013). Supportive caregiving environments and access to psychosocial resources have been shown to reduce stress-related psychological difficulties and promote positive adjustment among orphaned youth (Shiferaw et al., 2018; Kaur & Rani, 2020). These findings align with ecological and resilience-based frameworks, emphasizing that strengthening individual and environmental resources is crucial for enhancing psychological well-being among orphan adolescents.

IV CONCLUSION

Taken together, the reviewed studies from support a multidirectional and interactive model, wherein age and gender shape perceived stress, which in turn influences psychological well-being. At the same time, well-being can also moderate stress perception, suggesting a reciprocal relationship rather than a unidirectional pathway. The presence of both positive and negative findings across studies reflects methodological differences, cultural contexts, and variability in institutional environments. These patterns align strongly with Lazarus and Folkman's transactional stress model and ecological systems theory, emphasizing that psychological outcomes emerge from continuous interactions between individual characteristics and environmental conditions. Simply put stress and well-being don't operate in isolation, they affect together, depending on context.

V RECOMMENDATIONS FOR FUTURE STUDY

The reviewed literature from the past decade strongly supports the conclusion that age and gender are not merely background variables but central determinants of adolescent mental health. Failure to account for these factors may obscure high-risk subgroups and limit the effectiveness of mental health interventions. Age-appropriate interventions are essential, with a stronger focus on transition planning, career guidance, and autonomy- building for older adolescents. Similarly, gender-responsive approaches that address emotional expression, coping skills, and social empowerment-particularly for adolescent girls- are critical for reducing stress and enhancing psychological well-being.

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