

Relationship between Adverse Life Events and Post Traumatic Growth among Comboni Missionary Sisters in East Africa Province

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ABSTRACT

Comboni Missionary Sisters serving in fragile mission contexts are frequently exposed to complex and cumulative adversities that impact their psychological and spiritual well-being. Contemporary research underscores the concept of Post-Traumatic Growth (PTG), describing the constructive psychological evolution that can emerge from the struggle with such traumatic experiences. This study investigated the correlation between Adverse Life Events (ALEs) and PTG among Sisters serving in Uganda and South Sudan. Grounded in theories of stress and coping, the study adopted a correlational research design. The Traumatic Life Events Questionnaire (TLEQ) and the Post-Traumatic Growth Inventory (PTGI) were used to survey 63 sisters currently rendering missionary service in East Africa. Findings from a Pearson correlation analysis indicated a statistically significant, weak positive relationship between ALEs and PTG ($r = .259$, $p = .041$). The coefficient of determination ($r^2 = .067$) indicates that while adversity is a catalyst for transformation, it only accounts for 6.7% of the variance in growth scores. These results suggest that exposure to hardship is a necessary but insufficient predictor of growth, highlighting that 93.3% of the variance is likely driven by spiritual and communal mediating factors. The study concludes that PTG in this context is an active, spiritually grounded achievement, necessitating structured institutional support and trauma-informed vocational frameworks to facilitate transformation.

Keywords: Post-traumatic growth, adverse life events, Comboni Missionary Sisters, East Africa Province.

INTRODUCTION

During the last century, scientific literature in the field of mental health has focused primarily on the negative consequences of traumatic events. More recently, increasing attention has been placed on the possibility of resilience and, ultimately, Post-Traumatic Growth (PTG) (Dall’Osso et al., 2022). While the idea of a positive outcome following adversity is not new, being a concept present in major religions and philosophy, it received little scientific attention until the mid-1990s when Tedeschi and Calhoun (1996) theorized it. In contexts like South Sudan, where the political and social situation remains highly challenging, literature linking Adverse Life Events (ALEs) and PTG is scarce. Existing studies have primarily focused on the negative mental health consequences for citizens experiencing trauma, often overlooking the potential for growth.

At the global level, research highlights a dynamic interplay between adversity, distress, and growth. Chen et al. (2021) examined trauma and PTG among nurses in China and Taiwan during the COVID-19 pandemic, finding that nearly 40% of the sample reported growth, significantly outnumbering those meeting clinical criteria for trauma (13.3%). While these findings provide robust data on the prevalence of PTG in high-stress professions, the study lacked a guiding theoretical framework to explain the specific mechanisms behind this growth. Similarly, Jayawickreme et al. (2022) conducted a year-long longitudinal study to pinpoint the link between fluctuations in PTG and eudaimonic well-being. Their findings indicated that negative events predicted short-term increases in PTG, which in turn forecasted improvements in global well-being. However, the study noted a lack of steady, long-term shifts in PTG, casting doubt on the sustained nature of such transformations in general populations. Complementing these findings, a longitudinal study in Japan by Hikichi et al. (2024) uncovered a

significant inverse-U-shaped relationship: moderate stress predicted greater growth, whereas extremely high stress levels showed no such link. Notably, PTG was associated with objective health benefits, including slower cognitive decline. While Hikichi et al. provided evidence of the long-term impact of PTG, they primarily focused on individual outcomes in a specific cultural setting.

Within Sub-Saharan Africa, research provides further insight into how the ALE-PTG relationship is shaped by regional conditions. Mahlatji (2022) conducted a correlational study among students in South Africa, confirming that PTG and trauma can coexist, though the strength of the relationship was secondary to the influence of the adverse events themselves. However, Mahlatji's reliance on a global PTG score limited the ability to analyze specific domains of growth. Further exploring the African context, Aliche and Idemudia (2024) investigated the relationship between post-traumatic stress symptoms and PTG in Nigeria. Their results indicated that social support, distress tolerance, and a robust sense of purpose significantly enhanced growth outcomes, confirming that growth is a product of how symptoms interface with spiritual and communal resources.

Exenberger et al. (2022) utilized a quantitative survey in Sierra Leone to investigate how widespread adversities influenced PTG. While their factor analysis identified a single overarching growth factor, their broader findings suggested that in communal societies, growth often extends into collective and relational dimensions. Research in post-conflict and displacement contexts within East Africa further expands this perspective. Ballah (2023) uncovered a strong quantitative link between individual resilience and PTG among South Sudanese refugees in Ugandan settlements. While Ballah's research highlighted the role of spiritual beliefs, it treated PTG as a broad, uniform concept.

In terms of environmental navigation, Munive (2021) explored resilience-building strategies among displaced South Sudanese civilians, identifying formal support networks as a primary mechanism for navigating hardship. Finally, O'Byrne's (2022) work in Northern Uganda highlights the concept of "resistant resilience," where individuals reclaim personal autonomy and purpose. While O'Byrne's approach precluded a statistical examination of trauma and psychological outcomes, it provides a theoretical foundation for the necessity of domain-specific measurement.

The existing literature confirms that post-traumatic growth is not a predictable or linear recovery path but is deeply contingent on an individual's social and cognitive context. However, several critical gaps remain. First, while global and regional studies provide a foundational understanding, there is a lack of data regarding populations where a religious calling and communal mission serve as the primary framework for identity. Current research does not fully account for "vocational stressors", such as role strain and the moral weight of service in conflict zones, nor does it adequately explore how spiritual identity may stabilize growth compared to general populations. Furthermore, many existing studies rely on aggregate PTG scores, overlooking the granular, domain-specific transformations that occur in relational and spiritual dimensions within faith-based missions. The present study seeks to fill these gaps by investigating the ALE-PTG relationship among the Comboni Missionary Sisters in East Africa. The study investigates the specific statistical relationship between the frequency and severity of adverse life events and the resulting degrees of post-traumatic growth across various domains. This analysis clarifies how a mission-driven identity and spiritual grounding function as engines for resilience, providing a culturally and spiritually grounded extension of post-traumatic growth theory.

METHODOLOGY

Research Design

This study utilized a correlational research design to examine the relationship between Adverse Life Events (ALEs) and Post-Traumatic Growth (PTG) among Comboni Missionary Sisters in the East Africa Province. This design was chosen to statistically evaluate the strength and direction of associations between trauma exposure and psychological growth without manipulating the variables.

Location of the Study

The study was conducted within the East Africa Province of the CMS, specifically targeting missions in Uganda and South Sudan. These neighbouring countries present a unique landscape of adversity; while Uganda is

characterized by relative stability interspersed with environmental and socio-economic challenges, South Sudan remains a high-risk humanitarian context marked by semi-arid climates and systemic instability. The Sisters have maintained a continuous presence in these regions since 1918 and 1919, respectively, making them a repository of long-term vocational experience in volatile settings.

Target Population and Sampling

The target population consisted of the 104 Comboni Missionary Sisters currently serving in Uganda and South Sudan. While the population is diverse in nationality, age and years of religious service, it is homogeneous in terms of vocational commitment and shared environmental stressors. The study utilized a census method, inviting the entire population (N=104) to participate to ensure full representation of the Province's diversity. The final analytical sample comprised 63 respondents, representing a response rate of 60.6%.

Instruments of Measure

The data for traumatic life events was collected using The Traumatic Life Events Questionnaire (TLEQ) developed by Kubany et al. (2000). This tool quantifies lifetime exposure to 24 potentially traumatic events. It measures the frequency of occurrences and the intensity of the emotional response (fear, helplessness, or horror) in alignment with PTSD Criterion A, allowing for a structured quantification of trauma history. Modifications were made with the developer's permission to ensure the items were culturally and vocationally relevant to the CMS context. The data for post-traumatic growth was collected using The Post-Traumatic Growth Inventory (PTGI) developed by Tedeschi and Calhoun (1996). This 21-item scale assesses positive psychological change across five domains: Relating to Others, New Possibilities, Personal Strength, Spiritual Change, and Appreciation of Life. Responses are recorded on a six-point Likert scale (0 = no degree to 5 = very great degree), providing continuous scores for statistical analysis.

Data Analysis

The data was analyzed using descriptive statistics and Pearson correlation analysis with Statistical Package for the Social Sciences (SPSS) version 23. Descriptive statistics were used to summarize participant demographics. Pearson Correlation analysis (r) was conducted to determine the relationship between adverse life events and post-traumatic growth among the sisters.

RESULTS AND DISCUSSION

The study aimed to establish the relationship between Adverse Life Events (ALEs) and Post-Traumatic Growth (PTG) among Comboni Missionary Sisters in the East Africa Province. The study started by presenting the demographic profile of the participants followed by the findings of the study.

Demographic Profile of Participants

Data was collected from the study participants in terms of their age, years in religious life, ministry context, and nationality (which eventually was grouped according to region of origin for clarity) in order to contextualize the findings and to examine how these variables may relate to experiences of adversity and post-traumatic growth. The findings are presented in Table 1.

Table 1 Demographic Distribution of Questionnaire Participants

Item	Category	N.	Percentage (%)
Age Bracket in Years	30 - 40	11	17.5%
	41 - 50	15	23.8%
	51 - 60	15	23.8%
	61 - 70	9	14.3%
	71 +	13	20.6%
Years Spent in Religious Life	0 - 10	11	17.5%
	11 - 25	17	27.0%

	26 - 40	22	34.9%
	41 +	13	20.6%
Ministry context	Health	16	25.4%
	Pastoral	23	36.5%
	Education	16	25.4%
	Other	8	12.7%
Nationality Grouped by Region of Origin	Africa	33	52.4%
	Europe	23	36.5%
	Latin America	7	11.1%
	Total	63	100%

Almost half of the sisters who answered the questionnaire (n=30, 47.6%) were between 41 and 60 years old. This makes the sample clearly middle-aged. However, a significant percentage (n=13, 20.6%) was 71 years of age or older, indicating a richness of life and missionary experience. The data indicate a highly experienced cohort in terms of years spent in religious life; the largest group (n=22, 34.9%) has served between 26 and 40 years, followed by 27% (n=17) who have spent 11 to 25 years in religious life. In terms of their active roles, the sisters' ministries span several domains: while pastoral work remains the most prominent (n=23, 36.5%), health and education each account for 25.4% (n=16) of the group. Participants represented the Congregation's global diversity, as African-born Sisters comprised the largest group (n=33, 52.4%), followed by those from Europe and Latin America.

Relationship between adverse life events and post-traumatic growth among Comboni Missionary Sisters in the East Africa Province

The relationship between the frequency of adverse life events (ALEs) and the degree of post-traumatic growth (PTG) among Comboni Missionary Sisters in the East Africa Province was investigated using a Pearson correlation analysis. This analysis sought to clarify whether greater exposure to adversity was associated with a higher degree of psychological and spiritual transformation.

Table 2 Correlation between Types of Adverse Life Events and Post Traumatic Growth

		Adverse Life Events	Post Traumatic Growth
Adverse Life Events	Pearson Correlation	1	.259*
	Sig. (2-tailed)		.041
Post Traumatic Growth	N	63	63
	Pearson Correlation	.259*	1
	Sig. (2-tailed)	.041	
	N	63	63

*. Correlation is significant at the .05 level (2-tailed).

As presented in Table 2, a statistically significant positive correlation was found between ALEs and PTG, $r = .259$, $p = .041$. Following standard conventions for behavioural sciences, the strength of this correlation is considered weak to modest. The coefficient of determination ($r^2 = .067$) indicates that ALEs account for approximately 6.7% of the variance in PTG scores. While the correlation is positive, suggesting that as exposure to adversity increases, reported growth also tends to increase, the modest magnitude of the relationship indicates that hardship is only a partial driver of the participants' development.

The finding that adversity is a significant but modest predictor of growth is consistent with the foundational framework of Tedeschi and Calhoun (2004). They conceptualize PTG not as a direct result of trauma, but as a by-product of the "seismic" cognitive and emotional processing that follows it. For the Comboni Sisters, the low r^2 suggests that the "what" of the trauma (the event itself) is far less important than the "how" of the response. As Jayawickreme et al. (2022) suggest, meaning-making is the essential bridge between suffering and development. In the context of a religious vocation, this meaning-making is likely supercharged by a "divine mission" framework, where suffering is not viewed as random but as a shared participation in a larger spiritual narrative.

Thus, growth is not a passive outcome of hardship but a deliberate act of reconstruction achieved through a synergy of psychological reassessment and vocational commitment.

The modest strength of the correlation ($r = .259$) may also be explained by the unique environmental conditions of the East Africa Province. Unlike samples that experience a single, isolated traumatic event (e.g., a car accident), the Sisters in South Sudan and Uganda navigate persistent, long-term stressors including political instability and humanitarian crises. This aligns with the non-linear relationship described by Hikichi et al. (2024). In an "inverted-U" model, moderate stress promotes growth, but chronic or extreme stress can begin to dampen it. The sisters' scores may reflect this "plateau" effect, where the sheer cumulative weight of ALEs in a fragile context requires such significant energy for daily survival that the rate of psychological expansion slows down.

The demographic profile of the participants provides further context for these results. With nearly half of the sisters being middle-aged (41–60 years) and a significant portion (34.9%) having over 26 years of religious service, this is a cohort defined by "vocational maturity." This longevity suggests that the sisters have developed what O'Byrne (2022) calls "resistant resilience", a stable, autonomy-driven purpose that persists despite environmental hostility. Furthermore, the regional findings in Sub-Saharan Africa (Aliche & Idemudia, 2024; Ballah, 2023) reinforce the idea that in communal societies, growth is rarely an individual achievement. The religious and communal setting of the Province provides a specialized "social scaffolding." The shared life, daily liturgy, and communal processing of mission-related challenges likely function as the primary variables occupying the 93.3% of variance not explained by ALEs. Consequently, PTG in this population is best understood as a social and existential achievement, where the spiritual identity of being a "Comboni Sister" reconfigures the statistical relationship between trauma and recovery.

LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FURTHER RESEARCH

Despite its valuable contribution to understanding post-traumatic growth within religious vocations, several limitations inherent to this study must be acknowledged. First, the final analytical sample size of 63 participants is relatively small, which naturally restricts the generalizability and transferability of these findings to other missionary communities, distinct religious congregations, or wider cultural settings. Second, the cross-sectional, correlational research design utilized here inherently isolates variables at a single point in time, thereby restricting the ability to establish definitive causal relationships between exposure to adverse life events and the manifestation of post-traumatic growth. Finally, while the statistical results emphasize the paramount importance of spiritual frameworks and communal scaffolding as vital mediating elements, these operational variables were not directly quantified or analyzed within the empirical model, leaving some interpretations regarding their functional mechanisms somewhat speculative.

To address these limitations and expand upon these foundational insights, future inquiries should prioritize several strategic areas. To improve the transferability of the findings, further research should utilize a larger and more diverse sample of missionary sisters drawn from different congregations, diverse socio-cultural backgrounds, and varied geographical contexts. Future studies should also consider employing mixed-method framework designs or longitudinal methodologies to track sisters across different stages of their missionary life, which would clarify how post-traumatic growth develops over time and better map causal pathways. Furthermore, researchers should employ multiple regression or path analysis to empirically test the variables that occupy the unexplained 93.3% of growth variance, focusing specifically on the roles of communal ties, spiritual practices, and religious attachment. Comparative studies between vowed religious missionaries and lay humanitarian workers in the same geographic regions could further isolate the unique impact of a religious calling. Lastly, a dedicated qualitative exploration of coping strategies is highly recommended to uncover the nuanced, "lived experience" of the specific spiritual, relational, and cognitive tools the sisters use to successfully navigate trauma.

CONCLUSION

The findings of this study demonstrate a statistically significant, weak-to-modest positive correlation between Adverse Life Events and Post-Traumatic Growth among Comboni Missionary Sisters in East Africa. While the results confirm that greater exposure to adversity is associated with higher levels of growth, the modest magnitude of this relationship ($r = .259$) underscores that adversity is not a direct or sufficient cause of transformation.

Instead, these findings provide empirical validation for Post-Traumatic Growth Theory, suggesting that adversity serves primarily as a catalyst rather than a determinant. The data indicates that while hardship creates the necessary conditions for development, the actualisation of growth is likely driven by the transformative mediating processes unique to the sisters' vocational life, specifically their spiritual frameworks and communal support systems. Ultimately, for the Comboni Missionary Sisters, post-traumatic growth is not a passive byproduct of trauma, but an active, spiritually grounded achievement.

RECOMMENDATIONS

The empirical evidence demonstrating that exposure to adversity is a significant but modest catalyst for growth suggests that psychological and spiritual transformation among the Comboni Missionary Sisters is not an automatic outcome of trauma, but a product of intentional cognitive and spiritual processing. Based on these findings, it is recommended that the Provincial leadership institutionalize structured meaning-making frameworks and modules within initial and ongoing formation programs. These modules should be specifically tailored to assist sisters in cognitively and spiritually reframing complex vocational challenges through the unique lens of their congregational charism. Furthermore, because the weak-to-modest correlation warns that chronic or high-intensity adversity may eventually overwhelm individual coping capacities, the Province must implement targeted, trauma-informed support policies. This should include mandatory psychological debriefings and annual mental health check-ins, particularly for personnel deployed in high-risk humanitarian zones.

In addition to individual interventions, institutionalizing collective scaffolding is essential to nurture growth, given that post-traumatic transformation within a religious vocation functions largely as a communal achievement. Local communities should establish monthly peer-support meetings designed for shared communal processing, creating a safe space where vocationally mature sisters can mentor younger members in the spiritual anchoring and relational coping mechanisms necessary to convert hardship into growth. Finally, to ensure long-term psychological integration and support the critical "reconstruction" phase of post-traumatic growth, the General Chapter should develop sustainable policies regarding vocational wellbeing. These policies should mandate structured rest periods, regular sabbaticals, and formal reintegration programs following high-stress or traumatic missionary assignments, thereby securing the dedicated time and space required for profound emotional and cognitive processing.

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