

## The mediating role of meaning-making in the relationship between death anxiety and posttraumatic growth among nurses in Bulacan, Philippines

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Received: 01 March 2026

Revised: 01 April 2026

Accepted: 04 April 2026

Available Online: 16 April 2026

Volume 1 (2026), Issue 2, P-ISSN – 3116-3866; E-ISSN - 3116-3874

<https://doi.org/10.63498/inclinphs8>

### Abstract

**Aim:** This study examined the mediating role of meaning-making in the relationship between death anxiety and posttraumatic growth among nurses in selected hospitals in Bulacan, Philippines. Although moderate death anxiety has been documented among nurses globally, the mechanism through which mortality-related distress contributes to psychological growth remains unclear, particularly in resource-constrained Philippine healthcare settings.

**Methods:** A quantitative, cross-sectional, correlational design with mediation analysis was employed among 150 registered nurses recruited through total population sampling. Data were collected using the Revised Death Anxiety Scale, the Integration of Stressful Life Experiences Scale, and the Posttraumatic Growth Inventory. Pearson correlation and Hayes' PROCESS Model 4 with 5,000 bootstrap resamples were used to test the mediation model.

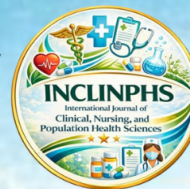
**Results:** Respondents reported moderate death anxiety ( $M = 1.98$ ), high meaning-making ( $M = 3.69$ ), and moderate posttraumatic growth ( $M = 2.99$ ). Death anxiety was negatively correlated with meaning-making ( $r = -.448$ ) and posttraumatic growth ( $r = -.315$ ), while meaning-making was positively correlated with posttraumatic growth ( $r = .428$ ), all statistically significant ( $p < .001$ ). Mediation analysis revealed that meaning-making significantly mediated the relationship between death anxiety and posttraumatic growth ( $ab = -0.293$ , BC 95% CI  $[-0.476, -0.148]$ ), accounting for 51.2% of the total effect.

**Conclusion:** The findings indicate that cognitive integration of death-related experiences, rather than death anxiety alone, facilitates posttraumatic growth among nurses. Hospitals may consider implementing structured meaning-making interventions to support nurses regularly exposed to patient death.

**Keywords:** death anxiety, posttraumatic growth, meaning-making, Filipino nurses, mediation analysis

### INTRODUCTION

Nurses who provide direct patient care routinely confront death, and this repeated exposure carries documented psychological consequences. A systematic review of 31 studies involving 6,819 nurses found that death anxiety among this population was at a moderate level, with contributing factors including job stress, burnout, and avoidance behavior toward dying patients (Norouzi et al., 2024). Yet exposure to death does not uniformly produce negative outcomes. A meta-analysis of 30 studies encompassing 14,022 nurses reported a pooled mean posttraumatic growth score of 66.34 on the PTGI, with growth levels gradually increasing from 2015 to 2022 (Zeng et al., 2024). What remains unclear is the mechanism through which mortality-related distress translates into growth. Park's (2010) meaning-making model proposes that when stressful experiences disrupt an individual's global meaning system, the cognitive effort to reduce that discrepancy drives adjustment outcomes — suggesting that meaning-making, not death anxiety alone, determines whether a nurse achieves psychological growth or remains in distress.



In the Philippines, nurses face conditions that amplify death exposure. Government hospitals continue to operate with nurse-to-patient ratios that far exceed recommended standards — typically 1:20 but escalating to as high as 1:50, against the Department of Health's 1:12 standard — placing nurses in sustained contact with dying patients under resource-constrained conditions (Alibudbud, 2023). Despite this, Philippine research on death-related psychological outcomes among nurses remains scarce. Mateo et al. (2020) conducted one of the few published studies, using qualitative phenomenology to explore Filipino nurses' experiences with death and dying, but did not measure death anxiety, meaning-making, or posttraumatic growth quantitatively. No published Philippine study has examined these three variables together or employed mediation analysis to test how they interrelate.

This absence reflects a convergence of research gaps. An empirical gap exists: no study — local or international — has tested the mediation pathway of death anxiety through meaning-making to posttraumatic growth. A population and contextual gap persists: Filipino nurses remain unrepresented in the quantitative literature on these constructs. A methodological gap is evident: existing studies rely predominantly on descriptive, correlational, or qualitative designs without decomposing direct and indirect effects. A theoretical gap exists: Park's (2010) meaning-making model has been widely cited but rarely tested empirically as a mediating framework in nursing populations exposed to patient death. Therefore, this study specifically addressed these gaps by testing whether meaning-making mediated the relationship between death anxiety and posttraumatic growth among nurses in Bulacan, Philippines.

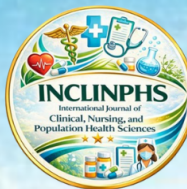
This study examined the mediating role of meaning-making in the relationship between death anxiety and posttraumatic growth among nurses in selected public hospitals in Bulacan. Theoretically, the study provides an empirical test of Park's (2010) meaning-making model as a mediating framework applied to death-related outcomes among nurses. Methodologically, it introduces mediation analysis through Hayes' (2022) PROCESS macro to a variable configuration not previously tested. Practically, the findings may inform the design of meaning-centered interventions for nurses who encounter patient death — particularly in Philippine hospital settings where structured psychosocial support remains limited.

### Review of Related Literature and Studies

Death anxiety among nurses has been consistently reported at moderate levels. Norouzi et al. (2024), in a systematic review of 31 studies involving 6,819 nurses, found moderate death anxiety associated with job stress, burnout, and avoidance of dying patients. El-Ashry et al. (2025) corroborated this among 417 emergency nurses, identifying a negative correlation with resilience ( $r = -.232, p < .001$ ) and higher anxiety among younger, less experienced nurses. However, most studies treat death anxiety as an endpoint rather than examining the downstream psychological processes it may trigger. In the Philippine context, this gap is pronounced: Mateo et al. (2020) and Jimenez et al. (2022) explored Filipino nurses' experiences with death qualitatively — identifying themes of acceptance, self-preservation, and holistic caring — but neither quantified death anxiety nor tested its relationship with other constructs.

The relationship between meaning-making and posttraumatic growth has been examined more extensively internationally, though rarely among death-exposed nurses. Park's (2010) meaning-making model proposes that discrepancies between appraised and global meaning generate distress that motivates cognitive integration, with successful integration producing better adjustment. Empirical support has emerged primarily from cancer and bereavement populations (Costa et al., 2022). Among nurses, Yim and Kim (2023) found that meaning in life partially mediated the resilience–PTG relationship among 220 Korean nurses using PROCESS Model 4, and Amirkhani et al. (2024) reported a significant direct effect of meaning of life on PTG among 263 Iranian nurses. However, none used the ISLES — which measures event-specific cognitive integration rather than dispositional meaning in life — and none positioned death anxiety as the antecedent. This distinction matters: meaning in life and meaning-making are conceptually and empirically distinct constructs (Holland et al., 2010), and conflating them risks misspecifying the mediation pathway.

Posttraumatic growth among nurses has been documented at moderate levels across meta-analyses: Wang et al. (2024) reported a pooled PTGI score of 55.69 across 35,621 nurses, and Zeng et al. (2024) reported 66.34 across 14,022 nurses. Mediation studies have begun mapping growth pathways — Ye et al. (2025) found death coping partially mediated the moral resilience–vicarious PTG relationship among 666 ICU nurses, and Kim et al. (2025) found grief support mediated COVID-19 stress and PTG among 211 Korean nurses. Yet death anxiety as a distinct construct measured by dedicated instruments has been largely absent from PTG mediation models — a



consequential gap given that death anxiety is theoretically positioned as the trigger activating meaning-making processes in the mortality-salient conditions under which nurses provide end-of-life care.

### Theoretical Framework

This study was anchored on three theories: Park's (2010) Meaning-Making Model, Tedeschi and Calhoun's (2004) Model of Posttraumatic Growth, and Roy's (1976, 2009) Adaptation Model of Nursing.

*Park's Meaning-Making Model.* Park (2010) proposed that when a stressful event creates a discrepancy between its appraised meaning and an individual's global meaning system (core beliefs, goals, sense of purpose), the resulting distress drives meaning-making efforts to reduce that discrepancy. Successful meaning-making produces adaptive outcomes including restored coherence and revised life priorities. In this study, death anxiety represents the distress generated by the discrepancy between patient death experiences and nurses' global meaning, meaning-making (measured by the ISLES) represents the integrative process, and posttraumatic growth represents the adjustment outcome. Park's model provides the primary justification for positioning meaning-making as the mediator — it is the process through which distress is transformed into adaptation, not merely a correlate of either variable.

*Tedeschi and Calhoun's Model of Posttraumatic Growth.* Tedeschi and Calhoun (1996, 2004) proposed that highly challenging life events can shatter fundamental assumptions about the world, triggering cognitive rebuilding that produces positive change across five domains: appreciation of life, relating to others, personal strength, new possibilities, and spiritual change. The model assumes that a threshold of distress is necessary to initiate this process and that deliberate cognitive engagement — not avoidance — drives growth. This aligns with the study's logic: death anxiety provides the necessary distress threshold, and meaning-making represents the active cognitive engagement through which nurses process death experiences. Posttraumatic growth (measured by the PTGI) is the outcome when this engagement succeeds.

*Roy's Adaptation Model of Nursing.* Roy (2009) conceptualized the person as a biopsychosocial adaptive system that processes environmental stimuli through two coping subsystems: the regulator (physiological) and the cognator (cognitive-emotive, involving perception, information processing, learning, judgment, and emotion). When coping effectively manages stimuli, the result is an adaptive response. This model situates the mediation pathway within a nursing-specific lens: patient death functions as the focal environmental stimulus, meaning-making corresponds to cognator-mediated processing, and posttraumatic growth represents an integrated adaptive response — not mere survival of the experience but positive psychological change.

The three theories converge to trace a single coherent pathway that mirrors the study's statistical model. Roy frames the nurse as an adaptive system confronting death as an environmental stimulus processed through the cognator subsystem. Park specifies the internal mechanism of that processing — the effort to reconcile what the death experience means with what the nurse believes to be true about life. Tedeschi and Calhoun identify the positive outcome when that reconciliation succeeds. Together: stimulus (patient death) → distress (death anxiety) → cognator/meaning-making → adaptive outcome (posttraumatic growth). This directly maps onto the mediation model tested through the PROCESS macro for SPSS (Hayes, 2022), where death anxiety (X) relates to posttraumatic growth (Y) through meaning-making (M). The cross-sectional design precludes causal claims, but the convergence of all three frameworks provides a defensible theoretical rationale for the directional paths specified.

Figure 1 illustrates the conceptual framework of the study. Death Anxiety (X) serves as the independent variable, Meaning-Making (M) as the mediator, and Posttraumatic Growth (Y) as the dependent variable. Path *a* represents the effect of death anxiety on meaning-making, path *b* represents the effect of meaning-making on posttraumatic growth, and path *c'* represents the direct effect of death anxiety on posttraumatic growth after accounting for the mediator.

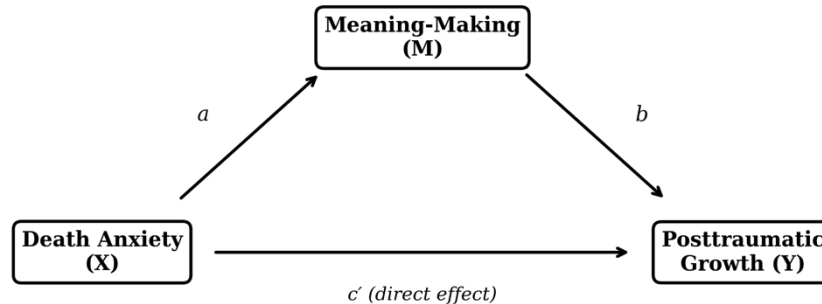
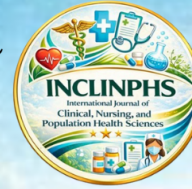


Figure 1. Conceptual Framework: Mediation Model

**Statement of the Problem**

Nurses who provide direct patient care are frequently exposed to patient death, a situation that can generate psychological distress, emotional fatigue, and anxiety. Death anxiety among nurses has been widely documented in international research and is associated with burnout, avoidance of dying patients, and decreased psychological well-being. However, exposure to death does not always result in negative outcomes; some nurses experience positive psychological changes known as posttraumatic growth. Understanding how nurses process death-related experiences is therefore essential for improving their psychological resilience and supporting quality nursing care.

Despite increasing global research on death anxiety and posttraumatic growth, the mechanism linking these constructs remains insufficiently understood. The meaning-making model suggests that individuals cognitively integrate stressful experiences in order to reconcile them with their broader belief systems. Through this process, distressing experiences may lead to adaptive psychological outcomes such as posttraumatic growth. However, empirical studies testing meaning-making as a mediating mechanism between death anxiety and posttraumatic growth are extremely limited, particularly in nursing populations exposed to patient death.

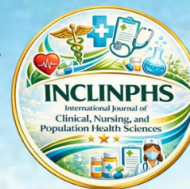
In the Philippine healthcare system, nurses often work in resource-constrained hospital environments where high nurse-to-patient ratios and frequent exposure to critically ill patients may intensify encounters with death. Despite these conditions, research examining the psychological processes underlying nurses’ responses to patient death remains scarce in the Philippine context. Existing studies have primarily focused on qualitative descriptions of nurses’ experiences rather than quantitative analyses of the psychological mechanisms that influence growth outcomes.

Given these gaps, there is a need to examine how Filipino nurses process death-related experiences and whether cognitive integration through meaning-making facilitates posttraumatic growth. This study therefore investigates the mediating role of meaning-making in the relationship between death anxiety and posttraumatic growth among nurses in selected hospitals in Bulacan, Philippines.

**Research Questions**

This study sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
  - age
  - sex
  - civil status
  - highest educational attainment
  - years of clinical experience
  - current unit or department
  - frequency of patient death encounters?
2. What is the level of death anxiety among the respondents?
3. What is the level of meaning-making among the respondents?



4. What is the level of posttraumatic growth among the respondents?
5. Is there a significant relationship between death anxiety and posttraumatic growth among the respondents?
6. Is there a significant relationship between death anxiety and meaning-making among the respondents?
7. Is there a significant relationship between meaning-making and posttraumatic growth among the respondents?
8. Does meaning-making significantly mediate the relationship between death anxiety and posttraumatic growth among the respondents?

All hypotheses were tested at a 0.05 level of significance.

Ho<sub>1</sub>: There is no significant relationship between death anxiety and posttraumatic growth among the respondents.

Ho<sub>2</sub>: There is no significant relationship between death anxiety and meaning-making among the respondents.

Ho<sub>3</sub>: There is no significant relationship between meaning-making and posttraumatic growth among the respondents.

Ho<sub>4</sub>: Meaning-making does not significantly mediate the relationship between death anxiety and posttraumatic growth among the respondents.

## METHODS

### Research Design

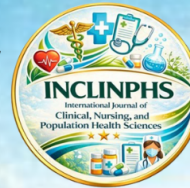
This study employed a quantitative, cross-sectional, correlational design with mediation analysis. A correlational design examines relationships among variables as they naturally occur without manipulation or intervention (Polit & Beck, 2021), while the cross-sectional component indicates that data were collected at a single point in time (Creswell & Creswell, 2018).

This design was appropriate because the study sought to determine relationships among death anxiety, meaning-making, and posttraumatic growth — none of which were experimentally induced. Beyond bivariate relationships (Objectives 5–7), the study tested whether meaning-making functioned as an intervening mechanism through which death anxiety relates to posttraumatic growth (Objective 8). A standard correlational design could identify associations but could not decompose the total effect into direct and indirect components. Mediation analysis through Hayes' (2022) PROCESS macro (Model 4) with 5,000 bootstrap resamples addressed this — consistent with Park's (2010) meaning-making model and Tedeschi and Calhoun's (2004) posttraumatic growth framework. The bootstrap method was used over traditional approaches because it does not assume normality of the indirect effect distribution, yielding more accurate inference with moderate sample sizes (Hayes, 2022). The cross-sectional nature of the design precluded causal inferences; directional paths in the mediation model reflected theoretical propositions, not empirically established causation.

### Population and Sampling

The respondents were registered nurses employed in selected public hospitals in Bulacan, Philippines, selected based on direct clinical exposure to patient death. Inclusion criteria required: (1) a valid PRC license, (2) current hospital employment in Bulacan, (3) assignment to units with direct patient care, and (4) at least one patient death encounter within the past 12 months — ensuring experiential basis for all three instruments, particularly the ISLES. Nurses in purely administrative roles, those with less than six months of clinical experience, and those on extended leave during data collection were excluded.

The minimum sample size was computed using G\*Power 3.1 (Faul et al., 2009) for linear multiple regression — the statistical foundation of PROCESS mediation analysis — with parameters of  $f^2 = .15$ ,  $\alpha = .05$ ,  $1 - \beta = .80$ , and two predictors. The computation yielded a minimum of 68 respondents; however, Fritz and MacKinnon (2007) recommended 71–148 participants for bias-corrected bootstrap mediation depending on path effect sizes. A target of 150 was set to ensure adequate power for the indirect effect test. The total eligible population across the selected hospitals was 162 nurses. Since this fell within the target range, total population sampling was employed — all eligible nurses were invited to participate, and 150 completed the survey (response rate: 92.6%). Total population sampling was appropriate given the accessible population size and the aim to maximize statistical power without introducing sampling bias (Polit & Beck, 2021).



### Instruments

Three standardized instruments were used: the Revised Death Anxiety Scale for death anxiety, the Integration of Stressful Life Experiences Scale for meaning-making, and the Posttraumatic Growth Inventory for posttraumatic growth. A demographic profile sheet accompanied the instruments.

Part I: Demographic Profile. A researcher-constructed questionnaire collected data on age, sex, civil status, highest educational attainment, years of clinical experience, current unit/department, and frequency of patient death encounters (Objective 1).

Part II: Revised Death Anxiety Scale (RDAS). The 25-item RDAS (Thorson & Powell, 1992, 1994) measured anxiety related to personal death. Items were rated from 0 (*strongly disagree*) to 4 (*strongly agree*), with eight reverse-scored items (4, 10, 11, 13, 17, 21, 23, 25). Total scores ranged from 0–100; higher scores indicated greater death anxiety. Original  $\alpha = .83$ , with  $.80$ – $.91$  across subsequent studies. Cronbach's alpha for this study was  $.870$ , indicating good internal consistency. Permission to use was requested from the original authors.

Part III: Integration of Stressful Life Experiences Scale (ISLES). The 16-item ISLES (Holland et al., 2010) measured meaning-making through two subscales: Footing in the World (Items 1, 3, 5, 7, 9, 11, 12, 13, 14, 15, 16) and Comprehensibility (Items 2, 4, 6, 8, 10). Items were rated from 1 (*strongly agree*) to 5 (*strongly disagree*); Item 2 was reverse-scored. Higher scores indicated greater adaptive integration. Original  $\alpha = .94$  total,  $.93$  and  $.80$  for subscales. Per the authors' instruction, respondents were directed to answer with reference to their most significant patient death experience (Holland et al., 2010). Cronbach's alpha for this study was  $.930$  for the total scale,  $.917$  for Footing in the World, and  $.779$  for Comprehensibility. Permission was obtained from the original authors.

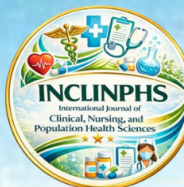
Part IV: Posttraumatic Growth Inventory (PTGI). The 21-item PTGI (Tedeschi & Calhoun, 1996) measured posttraumatic growth across five subscales: Relating to Others (6, 8, 9, 15, 16, 20, 21), New Possibilities (3, 7, 11, 14, 17), Personal Strength (4, 10, 12, 19), Spiritual Change (5, 18), and Appreciation of Life (1, 2, 13). Items were rated from 0 (*I did not experience this change*) to 5 (*I experienced this change to a very great degree*). Total scores ranged from 0–105; higher scores indicated greater growth. Original  $\alpha = .90$ , subscale alphas  $.67$ – $.85$ . The PTGI is freely available for research use. Cronbach's alpha for this study was  $.926$  for the total scale, with subscale reliabilities ranging from  $.616$  (Spiritual Change) to  $.816$  (Relating to Others).

### Data Collection

Approval was secured from the research adviser, thesis committee, and participating hospitals. Content validity of the three adopted instruments was evaluated by three subject matter experts who confirmed the relevance, clarity, and cultural appropriateness of all items for the target population. No items were flagged for revision. Ethics clearance was obtained from the researchers' Institutional Ethics Review Committee. Informed consent was secured prior to survey administration. Questionnaires were distributed face-to-face and self-administered, requiring approximately 15–20 minutes per respondent. Data collection was conducted from January to February 2026. All completed questionnaires were stored in a locked cabinet accessible only to the researcher, with digital files password-protected, in compliance with Republic Act No. 10173 (Data Privacy Act of 2012). Data will be retained for five years after study completion, after which physical copies will be shredded and digital files permanently deleted.

### Treatment of Data

Descriptive statistics were used to address Objectives 1 through 4. Frequency counts and percentages described the demographic profile (Objective 1). Weighted mean and standard deviation described the levels of death anxiety, meaning-making, and posttraumatic growth (Objectives 2–4). Prior to inferential analysis, the Shapiro-Wilk test was conducted to assess the normality of data distribution for each variable. If the Shapiro-Wilk p-value exceeded  $.05$ , the data were considered normally distributed and parametric tests were applied; if  $p \leq .05$ , non-parametric alternatives were used. For Objectives 5–7, Pearson product-moment correlation (or Spearman rho if normality was violated) examined the bivariate relationships between death anxiety and posttraumatic growth (Objective 5), death anxiety and meaning-making (Objective 6), and meaning-making and posttraumatic growth (Objective 7). These three correlations correspond to the total/direct effect (c path), a-path, and b-path of the mediation model, respectively. For Objective 8, mediation analysis was conducted using Hayes' (2022) PROCESS macro Model 4 in SPSS, with 5,000 bootstrap resamples generating bias-corrected 95% confidence intervals for the indirect effect. The indirect effect was considered statistically significant if the confidence interval did not contain zero — no p-value is reported for the indirect effect, as the bootstrap confidence interval serves as the inferential test



(Hayes, 2022). All hypotheses were tested at a 0.05 level of significance. Data were analyzed using IBM SPSS Statistics Version 26.

**Ethical Considerations**

The study adhered to the Belmont Report (National Commission for the Protection of Human Subjects, 1979), the Declaration of Helsinki (World Medical Association, 2013), and Republic Act No. 10173 (Data Privacy Act of 2012). Informed consent was obtained prior to participation; respondents were briefed on the study's purpose, procedures, risks, and their right to withdraw without penalty. Confidentiality — not anonymity — was maintained, as data collection was face-to-face. Respondents were assigned numerical codes, and no identifiable information appeared in any output or report. The study posed minimal risk, including time expenditure and potential discomfort from reflecting on patient death. Respondents were forewarned of death-related content and could discontinue at any point; referral information for counseling was made available. Selection was based solely on inclusion criteria, with no exclusions based on sex, religion, or ethnicity. All data were stored in a locked cabinet and password-protected files accessible only to the researcher, to be retained for five years and then destroyed.

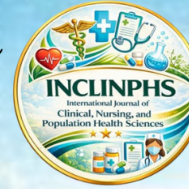
**RESULTS and DISCUSSION**

This section presents the findings and discussion organized according to the eight research objectives. The study employed a quantitative, cross-sectional, correlational design with mediation analysis among 150 registered nurses from selected hospitals in Bulacan, Philippines. Data were collected using three standardized instruments: the Revised Death Anxiety Scale (Thorson & Powell, 1992, 1994), the Integration of Stressful Life Experiences Scale (Holland et al., 2010), and the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996). All three instruments demonstrated acceptable to excellent internal consistency: RDAS ( $\alpha = .870$ ), ISLES ( $\alpha = .930$ ), and PTGI ( $\alpha = .926$ ). Descriptive statistics addressed Objectives 1 through 4, Pearson product-moment correlation addressed Objectives 5 through 7, and Hayes' PROCESS Model 4 mediation analysis with 5,000 bootstrap resamples addressed Objective 8. All hypotheses were tested at a .05 level of significance.

**Table 1**

*Demographic Profile of the Respondents*

Demographic Variable / Category	f	%
<b>Age</b>		
22–30	78	51.9 <sup>a</sup>
31–40	49	32.7
41–50	19	12.7
51–60	4	2.7
<i>Total</i>	150	100.0
<b>Sex</b>		
Male	33	22.0
Female	117	78.0
<i>Total</i>	150	100.0
<b>Civil Status</b>		
Single	85	56.7
Married	57	38.0
Widowed	2	1.3
Separated	6	4.0
<i>Total</i>	150	100.0
<b>Highest Educational Attainment</b>		
Bachelor's Degree	105	69.9 <sup>a</sup>
With Master's Units	27	18.0
Master's Degree	13	8.7
With Doctoral Units	4	2.7
Doctoral Degree	1	0.7
<i>Total</i>	150	100.0
<b>Years of Clinical Experience</b>		



< 5 years	58	38.6 <sup>a</sup>
5–10 years	49	32.7
11–15 years	16	10.7
16–20 years	14	9.3
> 20 years	13	8.7
<i>Total</i>	150	100.0
<b>Current Unit/Department</b>		
Medical-Surgical	33	22.0
Emergency Department	27	18.0
Intensive Care Unit	23	15.3
Obstetrics/Gynecology	15	10.0
Pediatrics	15	10.0
Operating Room	13	8.7
Oncology	12	8.0
Others	12	8.0
<i>Total</i>	150	100.0
<b>Frequency of Patient Death Encounters</b>		
1–5 times	42	28.0
6–10 times	48	32.0
11–20 times	38	25.3
More than 20 times	22	14.7
<i>Total</i>	150	100.0

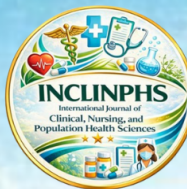
Note. *N* = 150. <sup>a</sup>Percentage adjusted by -0.1% due to rounding.

The respondents were predominantly young adults aged 22–30 (51.9%) and female (78.0%). More than half were single (56.7%), and the majority held a Bachelor's degree as their highest educational attainment (69.9%). In terms of clinical experience, the largest group had fewer than five years of experience (38.6%), followed by those with 5–10 years (32.7%). Medical-Surgical was the most represented unit (22.0%), followed by the Emergency Department (18.0%) and the Intensive Care Unit (15.3%). The majority of respondents had encountered patient death six to 10 times (32.0%), with 14.7% reporting more than 20 death encounters.

The sample was composed primarily of young, female, single nurses with bachelor's-level education and fewer than 10 years of clinical experience — a demographic composition consistent with the Philippine nursing workforce, which is predominantly female and concentrated in the younger age brackets (Alibudbud, 2023). The concentration of respondents in acute care settings (Medical-Surgical, Emergency Department, and Intensive Care Unit) ensured that the sample had substantial clinical exposure to patient death, which was the focal experience underlying all three study variables. The 14.7% who reported more than 20 death encounters represented the most death-exposed subgroup, whose responses may differ from those with fewer encounters.

**Table 2**  
*Level of Death Anxiety Among the Respondents*

Indicator	<i>M</i>	<i>SD</i>	<i>VI</i>	Rank
I fear dying a painful death.	2.24	0.83	Moderate	1
The pain involved in dying frightens me.	2.20	0.77	Moderate	2
I am not at all concerned over whether or not there is an afterlife.	2.11	0.81	Moderate	3
I am not worried about ever being helpless.	2.11	0.74	Moderate	3
The total isolation of death is frightening to me.	2.10	0.81	Moderate	5
I will leave careful instructions about how things should be done after I am	2.09	0.79	Moderate	6



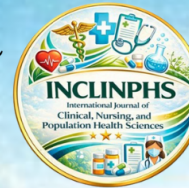
gone.

I hate to think about losing control over my affairs after I am gone.	2.07	0.81	Moderate	7
I dread to think about having an operation.	2.07	0.84	Moderate	7
The feeling that I will be missing out on so much after I die disturbs me.	2.05	0.90	Moderate	9
I am not afraid of a long, slow dying.	2.04	0.79	Moderate	10
I am looking forward to new life after I die.	2.03	0.83	Moderate	11
I am not at all anxious about what happens to the body after burial.	2.00	0.78	Moderate	12
I am not at all concerned with being in control of things.	1.99	0.76	Moderate	13
The idea of never thinking again after I die frightens me.	1.95	0.94	Moderate	14
I am troubled by the thought that my body will decompose in the grave.	1.95	0.87	Moderate	14
What happens to my body after I die does not bother me.	1.95	0.84	Moderate	14
The subject of life after death troubles me greatly.	1.89	0.77	Moderate	17
Not knowing what the next world is like troubles me.	1.88	0.84	Moderate	18
I do not mind the idea of being shut into a coffin when I die.	1.88	0.83	Moderate	18
I hate the idea that I will be helpless after I die.	1.85	0.75	Moderate	20
I am not particularly afraid of getting cancer.	1.83	0.85	Moderate	21
Coffins make me anxious.	1.82	0.85	Moderate	22
Never feeling anything again after I die upsets me.	1.81	0.84	Moderate	23
I am worried about what happens to us after we die.	1.79	0.87	Moderate	24
Being totally immobile after death bothers me.	1.75	0.78	Moderate	25
<b>Overall Death Anxiety</b>	<b>1.98</b>	<b>0.40</b>	<b>Moderate</b>	

*Note.*  $N = 150$ . Weighted mean computed as arithmetic mean of items (equal weights). Verbal interpretation: 3.21–4.00 = Very High; 2.41–3.20 = High; 1.61–2.40 = Moderate; 0.81–1.60 = Low; 0.00–0.80 = Very Low. Items 4, 10, 11, 13, 17, 21, 23, and 25 are reverse-scored; higher scores indicate greater death anxiety.

The respondents reported a moderate level of death anxiety overall ( $M = 1.98$ ,  $SD = 0.40$ ). All 25 items fell within the "Moderate" interpretation range (1.61–2.40), indicating a uniform distribution of anxiety across all facets of death-related concern. The highest-rated item was "I fear dying a painful death" ( $M = 2.24$ ,  $SD = 0.83$ ), followed by "The pain involved in dying frightens me" ( $M = 2.20$ ,  $SD = 0.77$ ), suggesting that fear of physical pain associated with the dying process was the most salient source of death anxiety. The lowest-rated item was "Being totally immobile after death bothers me" ( $M = 1.75$ ,  $SD = 0.78$ ). No item crossed the threshold into "High" (2.41) or "Low" (1.60), and the narrow overall standard deviation ( $SD = 0.40$ ) indicated relatively homogeneous responses across the sample.

The moderate level of death anxiety is consistent with Norouzi et al. (2024), who reported moderate death anxiety across 31 studies involving 6,819 nurses, and with Karabağ Aydın and Fidan (2022), who found a comparable pattern ( $M = 57.33$ ,  $SD = 16.20$  on the RDAS sum score) among 411 Turkish nurses. However, Qutishat and Aksoy (2025) reported low death anxiety among 183 critical care nurses in Oman, suggesting that organizational support



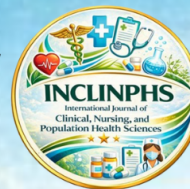
structures and death education may attenuate anxiety in some settings. The dominance of pain-related items aligns with "fear of pain associated with death" being one of the RDAS's factor-analytically derived dimensions (Thorson & Powell, 1994) and may reflect clinical familiarity with physical suffering in patient care. İnci and Koraş Sözen (2024) reported that Turkish nurses with higher death anxiety on the Thorson-Powell scale tended to focus on physical care needs while withdrawing from psychosocial engagement — a behavioral pattern worth monitoring given the present sample's pain-centered anxiety profile. The absence of any item reaching the "High" threshold suggested that these nurses had not developed debilitating death anxiety despite regular death exposure, which may indicate adaptive coping processes explored further in the mediation analysis.

**Table 3**  
*Level of Meaning-Making Among the Respondents*

Indicator	<i>M</i>	<i>SD</i>	VI	Rank
<b>Footing in the World</b>				
I don't understand myself anymore since this event.	3.94	0.70	High Integration	1
I haven't been able to put the pieces of my life back together since this event.	3.91	0.69	High Integration	2
Since this event, I feel like I'm in a crisis of faith.	3.83	0.73	High Integration	3
This event has made me feel less purposeful.	3.77	0.68	High Integration	4
Since this event happened, I don't know where to go next in my life.	3.75	0.70	High Integration	5
My beliefs and values are less clear since this event.	3.75	0.75	High Integration	5
My previous goals and hopes for the future don't make sense anymore since this event.	3.75	0.72	High Integration	5
Since this event, I have a harder time feeling like I'm part of something larger than myself.	3.75	0.71	High Integration	5
Since this event, the world seems like a confusing and scary place.	3.74	0.73	High Integration	9
After this event, life seems more random.	3.66	0.78	High Integration	10
If or when I talk about this event, I believe people see me differently.	3.65	0.72	High Integration	11
<b>Footing in the World (Subscale)</b>	<b>3.77</b>	<b>0.53</b>	<b>High Integration</b>	
<b>Comprehensibility</b>				
I have made sense of this event.	3.84	0.66	High Integration	1
This event is incomprehensible to me.	3.55	0.65	High Integration	2
I am perplexed by what happened.	3.55	0.74	High Integration	2
I would have an easier time talking about my life if I left this event out.	3.42	0.67	High Integration	4
I have difficulty integrating this event into my understanding about the world.	3.24	0.59	Moderate Integration	5
<b>Comprehensibility (Subscale)</b>	<b>3.52</b>	<b>0.48</b>	<b>High Integration</b>	
<b>Overall Meaning-Making</b>	<b>3.69</b>	<b>0.49</b>	<b>High Integration</b>	

*Note.*  $N = 150$ . Weighted mean computed as arithmetic mean of items (equal weights). Verbal interpretation: 4.21–5.00 = Very High Integration; 3.41–4.20 = High Integration; 2.61–3.40 = Moderate Integration; 1.81–2.60 = Low Integration; 1.00–1.80 = Very Low Integration. Most items are negatively worded; higher scores indicate greater adaptive integration (more successful meaning-making). Item 2 is reverse-scored.

The respondents reported a high level of meaning-making overall ( $M = 3.69$ ,  $SD = 0.49$ , "High Integration"). Footing in the World obtained a higher mean ( $M = 3.77$ ,  $SD = 0.53$ ) than Comprehensibility ( $M = 3.52$ ,  $SD = 0.48$ ), though both reached the "High Integration" threshold. The highest-rated item was "I don't understand myself anymore since this event" ( $M = 3.94$ ,  $SD = 0.70$ ), indicating strong disagreement with self-alienation and suggesting that respondents maintained a coherent sense of self despite encountering patient death. The only item below "High Integration" was "I have difficulty integrating this event into my understanding about the world" ( $M =$

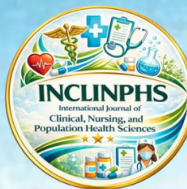


3.24, SD = 0.59, "Moderate Integration"), pointing to cognitive worldview integration as the most challenging aspect of meaning-making for this sample.

No prior study has used the ISLES among nurses exposed to patient death, limiting direct comparison. However, the high level of meaning-making aligns with Park's (2010) prediction that sustained cognitive processing of stressful events increases the likelihood of achieving meaning-made outcomes — and with a median of 6–10 death encounters, these respondents had repeated opportunities for such processing. The subscale pattern — Comprehensibility lagging behind Footing in the World — is consistent with Holland et al. (2010), who found in the original ISLES validation that comprehensibility was more vulnerable to disruption, particularly when stressful events involved unpredictability. Chen et al. (2023), in a construct validation among 563 Chinese physicians and nurses, similarly identified that patient deaths carry cognitive meanings beyond personal loss — including identity crisis and perceived professional failure — suggesting that comprehending a death event is a distinct and often more difficult task than maintaining one's broader life orientation. The single item at "Moderate Integration" may represent a specific target for meaning-centered interventions in hospital settings.

**Table 4***Level of Posttraumatic Growth Among the Respondents*

Indicator	<i>M</i>	<i>SD</i>	VI	Rank
<b>Relating to Others</b>				
I have more compassion for others.	3.21	1.16	High Growth	1
I more clearly see that I can count on people in times of trouble.	3.03	1.15	High Growth	2
I am more willing to express my emotions.	3.00	1.10	Moderate Growth	3
I have a greater sense of closeness with others.	2.99	1.07	Moderate Growth	4
I put more effort into my relationships.	2.93	1.20	Moderate Growth	5
I better accept needing others.	2.87	1.15	Moderate Growth	6
I learned a great deal about how wonderful people are.	2.73	1.21	Moderate Growth	7
<b>Relating to Others (Subscale)</b>	<b>2.97</b>	<b>0.79</b>	<b>Moderate Growth</b>	
<b>New Possibilities</b>				
I am able to do better things with my life.	2.73	1.14	Moderate Growth	1
I developed new interests.	2.73	1.11	Moderate Growth	1
I am more likely to try to change things which need changing.	2.68	1.10	Moderate Growth	3
I established a new path for my life.	2.67	1.29	Moderate Growth	4
New opportunities are available which wouldn't have been otherwise.	2.59	1.16	Moderate Growth	5
<b>New Possibilities (Subscale)</b>	<b>2.68</b>	<b>0.87</b>	<b>Moderate Growth</b>	
<b>Personal Strength</b>				
I am better able to accept the way things work out.	3.26	1.21	High Growth	1
I know better that I can handle difficulties.	3.21	1.19	High Growth	2
I discovered that I'm stronger than I thought I was.	3.14	1.19	High Growth	3
I have a greater feeling of self-reliance.	3.01	1.14	High Growth	4
<b>Personal Strength (Subscale)</b>	<b>3.16</b>	<b>0.89</b>	<b>High Growth</b>	
<b>Spiritual Change</b>				
I have a better understanding of spiritual matters.	3.07	1.22	High Growth	1
I have a stronger religious faith.	3.03	1.13	High Growth	2
<b>Spiritual Change (Subscale)</b>	<b>3.05</b>	<b>1.00</b>	<b>High Growth</b>	
<b>Appreciation of Life</b>				
I have a greater appreciation for the value of my own life.	3.39	1.13	High Growth	1
I can better appreciate each day.	3.35	1.18	High Growth	2
I changed my priorities about what is important in life.	3.26	1.09	High Growth	3
<b>Appreciation of Life (Subscale)</b>	<b>3.33</b>	<b>0.87</b>	<b>High Growth</b>	
<b>Overall Posttraumatic Growth</b>	<b>2.99</b>	<b>0.74</b>	<b>Moderate Growth</b>	



Note.  $N = 150$ . Weighted mean computed as arithmetic mean of items (equal weights). Verbal interpretation: 4.01–5.00 = Very High Growth; 3.01–4.00 = High Growth; 2.01–3.00 = Moderate Growth; 1.01–2.00 = Low Growth; 0.00–1.00 = Very Low Growth.

The respondents reported a moderate level of posttraumatic growth overall ( $M = 2.99$ ,  $SD = 0.74$ , "Moderate Growth"). Appreciation of Life obtained the highest subscale mean ( $M = 3.33$ ,  $SD = 0.87$ , "High Growth"), followed by Personal Strength ( $M = 3.16$ ,  $SD = 0.89$ ), Spiritual Change ( $M = 3.05$ ,  $SD = 1.00$ ), Relating to Others ( $M = 2.97$ ,  $SD = 0.79$ , "Moderate Growth"), and New Possibilities ( $M = 2.68$ ,  $SD = 0.87$ , "Moderate Growth"). The single highest-rated item was "I have a greater appreciation for the value of my own life" ( $M = 3.39$ ,  $SD = 1.13$ ), and the lowest-rated was "New opportunities are available which wouldn't have been otherwise" ( $M = 2.59$ ,  $SD = 1.16$ ). The overall composite mean fell just below the "High Growth" threshold of 3.01.

The moderate growth level is consistent with meta-analytic estimates: Zeng et al. (2024) reported a pooled PTGI score of 66.34 across 14,022 nurses, and Wang et al. (2024) reported 55.69 across 35,621 nurses. In a patient-death-specific context, Turgut and Yildiz (2023) found comparable results among 200 PICU nurses in Turkey ( $M = 61.45$ ,  $SD = 24.93$ ), with grief intensity negatively correlated with growth. Appreciation of Life ranking highest is consistent with the theoretical expectation that mortality-salient events trigger re-evaluation of life priorities (Tedeschi & Calhoun, 2004), while New Possibilities ranking lowest suggests that translating death-related gains into new life directions remained more difficult. Kim et al. (2025) observed that PTG after patient death was shaped less by exposure frequency and more by grief support availability, reinforcing that growth depends on processing conditions rather than exposure alone. The near-boundary mean ( $M = 2.99$ ) suggests that with additional meaning-making support, these nurses could achieve more substantial growth outcomes.

**Table 5**  
*Relationship Between Death Anxiety and Posttraumatic Growth*

Variable Pair	Test Used	$r$	$p$	Decision	Magnitude	95% CI
Death Anxiety ↔ Posttraumatic Growth	Pearson $r$	-.315	< .001	Reject $H_0$	Medium (Moderate)	[-.450, -.160]

Note.  $N = 150$ .  $\alpha = .05$ , two-tailed. Effect size interpreted using Cohen's (1988) conventions: small ( $r = .10$ –.29), medium ( $r = .30$ –.49), large ( $r \geq .50$ ).

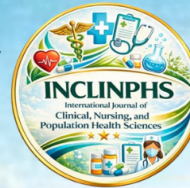
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Pearson  $r$  was used to determine the significant relationship between death anxiety and posttraumatic growth. Both variables met normality assumptions (RDAS: Shapiro-Wilk  $W = 0.989$ ,  $p = .275$ ; PTGI:  $W = 0.991$ ,  $p = .455$ ), and linearity was satisfied ( $|\text{Pearson-Spearman difference}| = 0.06$ ). The analysis revealed a medium (moderate) negative correlation ( $r = -.315$ ,  $p < .001$ , 95% CI [-.450, -.160]). The null hypothesis was rejected.

No prior study has tested this bivariate relationship using the RDAS and PTGI among nurses, but the negative direction is consistent with Tedeschi and Calhoun's (2004) model, which posits that growth emerges from cognitive engagement with distress rather than from distress itself — meaning unprocessed death anxiety would be associated with diminished growth. Aliche et al. (2024) similarly reported a significant negative association between death anxiety and PTG among 390 cancer patients, with social support buffering the relationship; despite the population difference, the convergence of direction strengthens the theoretical coherence of the present finding. This result pointed to the need for mechanisms that help nurses process death anxiety constructively — a pathway examined in objective 8.

**Table 6**  
*Relationship Between Death Anxiety and Meaning-Making*

Variable Pair	Test Used	$r$	$p$	Decision	Magnitude	95% CI
Death Anxiety ↔ Meaning-Making	Pearson $r$	-.448	< .001	Reject $H_0$	Medium	[-.570, -.310]



Making

(Moderate)

Note.  $N = 150$ .  $\alpha = .05$ , two-tailed. Effect size interpreted using Cohen's (1988) conventions: small ( $r = .10-.29$ ), medium ( $r = .30-.49$ ), large ( $r \geq .50$ ).  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Pearson  $r$  was used to determine the significant relationship between death anxiety and meaning-making. Both variables met normality assumptions (RDAS: Shapiro-Wilk  $W = 0.989$ ,  $p = .275$ ; ISLES:  $W = 0.988$ ,  $p = .211$ ), and linearity was satisfied ( $|\text{Pearson-Spearman difference}| = 0.002$ ). The analysis revealed a medium (moderate) negative correlation ( $r = -.448$ ,  $p < .001$ , 95% CI  $[-.570, -.310]$ ). The null hypothesis was rejected. This was the strongest bivariate correlation among the three inferential objectives (5-7).

The direction is consistent with Park's (2010) model, which predicts that high distress widens the discrepancy between appraised and global meaning, making cognitive integration more difficult. Holland et al. (2010), in the original ISLES validation, reported significant negative associations between ISLES scores and psychological distress across both bereaved and general stress samples, establishing that unsuccessful meaning integration is reliably linked with elevated distress. The present finding extends this pattern to a nursing-specific, death-exposure context. This association established that the independent variable was significantly associated with the proposed mediator — a necessary condition for the mediation model.

**Table 7**  
*Relationship Between Meaning-Making and Posttraumatic Growth*

Variable Pair	Test Used	$r$	$p$	Decision	Magnitude	95% CI
Meaning-Making Posttraumatic Growth	↔ Pearson $r$	.428	< .001	Reject $H_0$	Medium (Moderate)	[.290, .550]

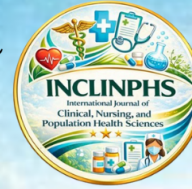
Note.  $N = 150$ .  $\alpha = .05$ , two-tailed. Effect size interpreted using Cohen's (1988) conventions: small ( $r = .10-.29$ ), medium ( $r = .30-.49$ ), large ( $r \geq .50$ ).  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Pearson  $r$  was used to determine the significant relationship between meaning-making and posttraumatic growth. Both variables met normality assumptions (ISLES: Shapiro-Wilk  $W = 0.988$ ,  $p = .211$ ; PTGI:  $W = 0.991$ ,  $p = .455$ ), and linearity was satisfied ( $|\text{Pearson-Spearman difference}| = 0.027$ ). The analysis revealed a medium (moderate) positive correlation ( $r = .428$ ,  $p < .001$ , 95% CI  $[.290, .550]$ ). The null hypothesis was rejected.

This finding corroborates Yim and Kim (2023), who demonstrated partial mediation of meaning in life between resilience and PTG among 220 Korean nurses, and Costa et al. (2022), who confirmed a consistent positive association between meaning-related constructs and PTG in a meta-analysis of cancer patients. The present study extends both by using the ISLES — which measures event-specific cognitive integration rather than dispositional meaning in life — anchored specifically to patient death. The distinction suggests that the active process of reconciling a death experience, not merely possessing a general sense of purpose, is what associates with growth. This association established that the mediator was significantly related to the outcome variable, supporting the mediation model tested.

**Table 8**  
*Mediation Model Fit: Death Anxiety, Meaning-Making, and Posttraumatic Growth*

Model	Outcome	$R$	$R^2$	Adj. $R^2$	$F$	$df_1$	$df_2$	$p$
Model 1 (a-path)	Meaning-Making	.448	.201	.196	37.26	1	148	< .001
Model 2 (b + c')	Posttraumatic Growth	.449	.202	.191	18.60	2	147	< .001



Total effect (c)	Posttraumatic Growth	.315	.099	.093	16.25	1	148	< .001
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Note.  $N = 150$ . Hayes PROCESS Model 4 with 5,000 bootstrap resamples.  $X =$  Death Anxiety (RDAS),  $M =$  Meaning-Making (ISLES),  $Y =$  Posttraumatic Growth (PTGI).

**Table 9**  
Mediation Path Coefficients: Death Anxiety, Meaning-Making, and Posttraumatic Growth

Path	Predictor	$B$	$SE$	$t$	$p$	$\beta$	95% CI
a ( $X \rightarrow M$ )	Death Anxiety	-0.543	0.089	-6.10	< .001	-.448	[-0.718, -0.367]
b ( $M \rightarrow Y \mid X$ )	Meaning-Making	0.540	0.124	4.36	< .001	.359	[0.295, 0.785]
c (total)	Death Anxiety	-0.573	0.142	-4.03	< .001	-.315	[-0.853, -0.292]
c' (direct)	Death Anxiety	-0.279	0.150	-1.86	.065	-.154	[-0.576, 0.017]

Note.  $N = 150$ .  $\alpha = .05$ .  $B =$  unstandardized coefficient.  $\beta =$  standardized coefficient. CIs are 95% confidence intervals for  $B$ .

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Table 10**  
Indirect Effect and Effect Decomposition: Meaning-Making as Mediator of Death Anxiety and Posttraumatic Growth

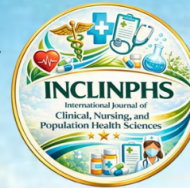
Effect	$B$	Boot SE	BC 95% CI	Significant?
Indirect (ab)	-0.293	0.083	[-0.476, -0.148]	Yes (CI excludes zero)

**Effect Decomposition**

Total effect (c)	-0.573
Direct effect (c')	-0.279
Indirect effect (ab)	-0.293
Proportion mediated	51.2%
Mediation type	Significant indirect effect; direct effect non-significant

Note.  $N = 150$ . Bootstrap = 5,000 resamples, bias-corrected 95% confidence interval. The indirect effect is significant because the bootstrap CI does not contain zero. No  $p$ -value is reported for the indirect effect; the bootstrap CI serves as the inferential test (Hayes, 2022). The indirect effect was significant (bootstrap CI excludes zero). The direct effect was reduced to non-significance ( $p = .065$ ), but this does not confirm that the direct effect is zero (Hayes, 2022).

Mediation analysis was conducted using Hayes' PROCESS Model 4 with 5,000 bootstrap resamples. All regression assumptions were satisfied: residual normality (Model 1:  $W = 0.994$ ,  $p = .835$ ; Model 2:  $W = 0.994$ ,  $p =$



.745), no autocorrelation (DW = 2.02; 2.06), homoscedasticity (BP = 2.87,  $p = .090$ ; BP = 1.01,  $p = .602$ ), acceptable Cook's D (max = 0.098), and no multicollinearity (VIF = 1.25).

The total effect of death anxiety on posttraumatic growth was significant ( $c$ :  $B = -0.573$ ,  $SE = 0.142$ ,  $t = -4.03$ ,  $p < .001$ ,  $\beta = -.315$ ,  $R^2 = .099$ ). Death anxiety significantly predicted meaning-making ( $a$ :  $B = -0.543$ ,  $SE = 0.089$ ,  $t = -6.10$ ,  $p < .001$ ,  $\beta = -.448$ ,  $R^2 = .201$ ), and meaning-making significantly predicted posttraumatic growth controlling for death anxiety ( $b$ :  $B = 0.540$ ,  $SE = 0.124$ ,  $t = 4.36$ ,  $p < .001$ ,  $\beta = .359$ ). When meaning-making was included, the direct effect became non-significant ( $c'$ :  $B = -0.279$ ,  $SE = 0.150$ ,  $t = -1.86$ ,  $p = .065$ ,  $R^2 = .202$ ). The indirect effect was significant ( $ab = -0.293$ , Boot  $SE = 0.083$ , BC 95% CI  $[-0.476, -0.148]$ ), with meaning-making accounting for 51.2% of the total effect. The results indicated a significant indirect effect, with the direct effect reduced to non-significance when meaning-making was included in the model. Following Hayes (2022), the full-versus-partial mediation dichotomy was not applied, as a non-significant direct effect does not establish that the direct path is zero — particularly given that  $c' = -0.279$  retained 48.8% of the total effect magnitude and approached conventional significance ( $p = .065$ ).

This pathway is directly predicted by Park's (2010) meaning-making model, which positions cognitive integration — not distress alone — as the mechanism determining whether a stressful experience produces adaptive or maladaptive outcomes. The significant indirect effect supports this claim: a substantial portion of the association between death anxiety and posttraumatic growth operated through the meaning-making pathway. However, the direct effect, while non-significant at conventional thresholds ( $p = .065$ ), was not trivially small ( $B = -0.279$ ), suggesting that other mechanisms besides meaning-making may also link death anxiety to growth outcomes.

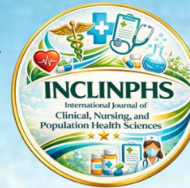
No prior study has tested this exact three-variable configuration. However, the pattern converges with related findings: Yim and Kim (2023) demonstrated partial mediation of meaning in life between resilience and PTG among 220 Korean nurses, Amirkhani et al. (2024) reported a significant direct effect of meaning of life on PTG among 263 Iranian nurses, and Ye et al. (2025) found that death coping ability partially mediated the relationship between moral resilience and vicarious PTG among 666 ICU nurses in China. The present study differs in that the antecedent is death anxiety rather than resilience, and meaning-making is operationalized as event-specific cognitive integration (ISLES) rather than dispositional meaning in life. That full mediation held under these more specific conditions suggests that the cognitive work of reconciling a death experience — not merely possessing a pre-existing sense of purpose — drives the distress-to-growth pathway.

The implication is that death anxiety alone was not sufficient to produce or prevent growth; hospital-based interventions targeting meaning-making — structured debriefing, reflective journaling, or group processing of patient death experiences — may facilitate the translation of death-related distress into positive psychological change among nurses.

Several limitations were recognized. The cross-sectional design captured data at a single point in time, precluding causal inferences; while the mediation model specified directional paths consistent with theory, the temporal sequence of death anxiety preceding meaning-making preceding posttraumatic growth could not be empirically established. All three variables were measured through self-administered questionnaires using Likert-type scales, introducing the possibility of self-report bias — particularly for death anxiety, where respondents may underreport or overreport socially sensitive death-related concerns — and common method bias, as shared method variance may have inflated the observed correlations. The sample was drawn exclusively from selected hospitals in Bulacan, limiting generalizability to nurses in other provinces, hospital types, or healthcare systems with different organizational cultures and death exposure patterns. Although the sample size of 150 met the minimum requirements for mediation analysis via both G\*Power and Fritz and MacKinnon's (2007) recommendations, a larger sample would have provided greater statistical power to detect smaller effects, particularly for the direct effect path ( $c' = -0.279$ ,  $p = .065$ ), which approached but did not reach significance.

## Conclusions

The study concluded that nurses in selected hospitals in Bulacan experienced moderate death anxiety — uniform across all facets and most pronounced in the physical pain dimension — alongside high meaning-making and moderate posttraumatic growth, with Appreciation of Life as the strongest growth domain and New Possibilities as the weakest. All three bivariate relationships were significant: death anxiety was negatively associated with both meaning-making ( $r = -.448$ ) and posttraumatic growth ( $r = -.315$ ), while meaning-making was positively associated with posttraumatic growth ( $r = .428$ ). The central finding was that meaning-making significantly mediated the



relationship between death anxiety and posttraumatic growth, accounting for 51.2% of the total effect. When meaning-making was included in the model, the direct effect of death anxiety on posttraumatic growth was reduced to non-significance ( $p = .065$ ), though the residual direct effect was not negligible. This indicates that the cognitive process of integrating death experiences into one's meaning system is a key — though not necessarily the sole — mechanism through which death anxiety relates to posttraumatic growth. The findings aligned with all three theoretical frameworks: Park's (2010) meaning-making model was directly supported by the full mediation pathway, Tedeschi and Calhoun's (2004) posttraumatic growth model was supported by the presence of distress-triggered growth concentrated in mortality-salient domains, and Roy's (2009) Adaptation Model was reflected in the cognator-mediated processing sequence from environmental stimulus to adaptive response. The cross-sectional design precludes causal claims; the directional paths tested reflect theoretical propositions, not empirically established causation.

### Recommendations

Based on the significant mediating role of meaning-making, hospitals may consider piloting structured meaning-making interventions — such as reflective debriefing or guided journaling — for nurses in death-exposed units, recognizing that facilitating cognitive integration, not merely reducing anxiety, is the pathway to growth.

Based on pain-related items ranking highest in death anxiety, continuing professional development programs may integrate end-of-life care training that addresses nurses' personal death-related concerns alongside clinical pain management competencies.

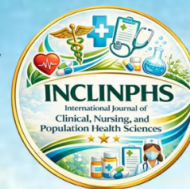
Based on Comprehensibility as the lowest-performing meaning-making subscale, nursing education institutions may incorporate death-related meaning-making content into curricula — including case-based discussions that help students develop cognitive frameworks for processing patient death before clinical exposure.

Based on New Possibilities as the lowest-rated growth subscale, nursing leaders may consider creating structured opportunities — mentorship, career counseling, or professional development pathways — that help death-exposed nurses translate experiential gains into new professional directions.

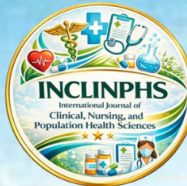
Based on the cross-sectional and single-locale limitations, future researchers may conduct longitudinal, multi-site replications and qualitative follow-ups exploring how nurses experience the meaning-making process, and investigate potential moderators such as death education, organizational support, and religiosity.

### REFERENCES

- Alibudbud, R. (2023). Addressing the burnout and shortage of nurses in the Philippines. *SAGE Open Nursing*, 9, 23779608231195737. <https://doi.org/10.1177/23779608231195737>
- Aliche, C. J., Idemudia, E. S., & Uche, P. N. (2024). Social support protects against the negative psychological impacts of death anxiety, and depression on posttraumatic growth in cancer patients. *OMEGA—Journal of Death and Dying*. Advance online publication. <https://doi.org/10.1177/00302228241302195>
- Amirkhani, M., Rafiei, H., & Jafari, H. (2024). How do some nurses achieve post-traumatic growth in stressful situations? Analysis of the role of hope, meaning of life, and resilience with the mediating role of coping self-efficacy. *Heliyon*, 10(21), e39069. <https://doi.org/10.1016/j.heliyon.2024.e39069>
- Chen, C., Chow, A. Y. M., & Jiao, K. (2023). The meaning of patient deaths for professional caregivers: A quantitative construct validation. *Death Studies*, 47(4), 440–449. <https://doi.org/10.1080/07481187.2022.2089776>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Costa, A. L., Sousa Santos, S., & Lopes, M. (2022). Meaning in life, meaning-making and posttraumatic growth in cancer patients: Systematic review and meta-analysis. *Frontiers in Psychology*, 13, 995981. <https://doi.org/10.3389/fpsyg.2022.995981>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.



- El-Ashry, A. M., Abdallah, H. M. M., Elsayed, S. M., Khedr, M. A., & El-Sayed, M. M. (2025). A cross-sectional study on resilience and death anxiety among emergency nurses. *BMC Nursing, 24*, 422. <https://doi.org/10.1186/s12912-025-02980-7>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science, 18*(3), 233–239. <https://doi.org/10.1111/j.1467-9280.2007.01882.x>
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Press.
- Holland, J. M., Currier, J. M., Coleman, R. A., & Neimeyer, R. A. (2010). The Integration of Stressful Life Experiences Scale (ISLES): Development and initial validation of a new measure. *International Journal of Stress Management, 17*(4), 325–352. <https://doi.org/10.1037/a0020892>
- İnci, F., & Koraş Sözen, K. (2024). Examining nurses' death anxiety and attitudes toward caring for dying patients: A cross-sectional study in Turkey. *Psychology, Health & Medicine, 29*(8), 1437–1447. <https://doi.org/10.1080/13548506.2024.2336892>
- Jimenez, O. B., Trajera, S. M., & Ching, G. S. (2022). Providing end-of-life care to COVID-19 patients: The lived experiences of ICU nurses in the Philippines. *International Journal of Environmental Research and Public Health, 19*(19), 12953. <https://doi.org/10.3390/ijerph191912953>
- Karabağ Aydın, A., & Fidan, H. (2022). The effect of nurses' death anxiety on life satisfaction during the COVID-19 pandemic in Turkey. *Journal of Religion and Health, 61*, 811–826. <https://doi.org/10.1007/s10943-021-01357-9>
- Kim, Y., Ahn, J.-H., Park, J., Bang, Y. R., Jun, J. Y., Hong, Y., Chung, S., Ahn, J., & Park, C. H. K. (2025). Healing through loss: Exploring nurses' post-traumatic growth after patient death. *Psychiatry Investigation, 22*(1), 40–46. <https://doi.org/10.30773/pi.2024.0253>
- Mateo, J. D., Carlos, M. A., Chua, W. R., Diza, K. B., Ponceca, J. S., Cajayon, S. B., & Cambel, M. S. (2020). "You'll get used to it": A lived experience of Filipino nurses in dealing with death and dying patient. *Enfermería Clínica, 30*, 107–112. <https://doi.org/10.1016/j.enfcli.2019.09.031>
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont report*. U.S. Department of Health and Human Services. <https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html>
- Norouzi, M., Ghorbani Vajargah, P., Falakdami, A., Mollaei, A., Takasi, P., Ghazanfari, M. J., Miri, S., Javadi-Pashaki, N., Osuji, J., Soltani, Y., Aghaei, I., Moosazadeh, M., Emami Zeydi, A., & Karkhah, S. (2024). A systematic review of death anxiety and related factors among nurses. *OMEGA—Journal of Death and Dying, 89*(4), 1473–1491. <https://doi.org/10.1177/00302228221095710>
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin, 136*(2), 257–301. <https://doi.org/10.1037/a0018301>
- Polit, D. F., & Beck, C. T. (2021). *Nursing research: Generating and assessing evidence for nursing practice* (11th ed.). Wolters Kluwer.
- Qutishat, M., & Aksoy, A. (2025). Relationship between death anxiety and resilience among critical care nurses in Oman. *Nursing in Critical Care, 30*(1), e13177. <https://doi.org/10.1111/nicc.13177>
- Republic of the Philippines. (2012). *Data Privacy Act of 2012* (Republic Act No. 10173). <https://www.officialgazette.gov.ph/2012/08/15/republic-act-no-10173/>
- Roy, C. (1976). *Introduction to nursing: An adaptation model*. Prentice-Hall.
- Roy, C. (2009). *The Roy adaptation model* (3rd ed.). Pearson Prentice Hall.
- Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*(3), 455–471. <https://doi.org/10.1007/BF02103658>
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*(1), 1–18. [https://doi.org/10.1207/s15327965pli1501\\_01](https://doi.org/10.1207/s15327965pli1501_01)
- Thorson, J. A., & Powell, F. C. (1992). A revised death anxiety scale. *Death Studies, 16*(6), 507–521. <https://doi.org/10.1080/07481189208252595>



- Thorson, J. A., & Powell, F. C. (1994). A revised death anxiety scale. In R. A. Neimeyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 31–43). Taylor & Francis.
- Turgut, M., & Yildiz, H. (2023). Investigation of grief and posttraumatic growth related to patient loss in pediatric intensive care nurses: A cross-sectional study. *BMC Palliative Care*, 22(1), 195. <https://doi.org/10.1186/s12904-023-01316-z>
- Wang, J., Luo, Z., Liao, X., Zeng, Y., Zhou, J., Liu, M., Yao, Y., Tian, J., & Luo, W. (2024). The levels and related factors of posttraumatic growth among nurses: A systematic review and meta-analysis. *Journal of Psychiatric and Mental Health Nursing*, 31(2), 241–254. <https://doi.org/10.1111/jpm.12975>
- World Medical Association. (2013). Declaration of Helsinki. *JAMA*, 310(20), 2191–2194.
- Ye, L., Li, J., Yang, H., Zheng, J., Chen, J., & Arber, A. (2025). The mediating role of death coping between moral resilience and vicarious posttraumatic growth among ICU nurses. *Journal of Advanced Nursing*. <https://doi.org/10.1111/jan.70249>
- Yim, J. Y., & Kim, J. A. (2023). The impact of resilience on post-traumatic growth among nurses in COVID-19-designated hospitals: The mediating effect of meaning in life. *Healthcare*, 11(21), 2895. <https://doi.org/10.3390/healthcare11212895>
- Zeng, L., Yu, S., Wang, J., Yang, P., Tang, P., & Su, S. (2024). The prevalence and factors of posttraumatic growth among nurses based on the PTGI: A systematic review and meta-analysis. *International Nursing Review*, 71(4), 828–840. <https://doi.org/10.1111/inr.12967>