The Phenomenon of Generational Cohort Differences in Life Satisfaction Reports

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Received: January 31, 2022          Accepted: March 25, 2022           Online Published: April 2, 2022

Abstract

The subjective well-being within society continues to be a focus in psychology, especially during the COVID 19 pandemic. The Life Satisfaction Scale for Apostolic Women Religious (LSSAWR) is designed to assess, across generations and congregations, the subjective well-being of Catholic Sisters worldwide. Sisters completing the LSSAWR online get a personal score report, and each congregation receives their LSSAWR scores in a Congregational Report (CR). The anonymous and confidential nature of gathering and reporting results, allows for honest feedback from Sisters about the current state of their community, and it provides insights for the potential planning of their preferred future. Additionally, CRs offer generational cohort comparisons across and within the domains that are reflective of various aspects as related to religious life. A multilevel model to account for clustering of Sisters within congregations was used to examine whether generational differences existed in LSSAWR scores. Results revealed significantly higher scores among elder cohorts as compared to younger cohorts but some differences in patterns among domain scores.

Keywords: commitment, ministry satisfaction, life satisfaction reports, women religious, age, generational cohort differences, well-being, meaning-making framework

1. Introduction

1.1 Introduce the Problem

Recent attention within the field of psychology is given to the subjective and religious/spiritual well-being of individuals and society, especially during the COVID-19 pandemic and its influence on public life (Bloom, 2019; Currie & Rossin-Slater, 2014; Diener, Oishi & Tay, 2018; Joshanloo, 2019; Krok, Zarzycka, & Telka, 2021; Kuhfeld, Soland, Tarasawa, Johnson, Ruzek, & Liu, 2020; Singh & Singh, 2020; Vieten & Lukoff, 2022; Zarzycka & Zietek, 2019). As such, psychologists are particularly interested in the impact that COVID-19 has on people’s mental health, life satisfaction, and on the workforce, and how it might change the future work environment (Carnevale & Hatak, 2020; Dobrakowski, Skalski, Surzykiewicz, Muszynska, & Konaszewski, 2021; Sonnentag, 2015; Xiong, Lipsitz, Nasri, Lui, Gill, Phan, Chen-Li, Iacobucci, Ho, Majeed, & McIntyre, 2020). Prior research has identified the importance of meaning making and its influence on individuals’ perceptions of their lives when overcoming adverse life circumstances. In fact, Park’s (2010) research led to the design of an “integrated model of meaning-making (p. 257)” as she explored the literature regarding peoples’ overall meaning-making abilities, and their attempts to adjust to stressful life events. Particularly, Park (2010) identified that people’s global meaning-making comprises their “beliefs, goals, and subjective feelings,” and that “relationships, work, religion, knowledge, and achievement” are the most frequently described global goals (p. 258). Park’s (2010) findings are supported in other research, in which the importance of meaning-making, and/or the desire for meaningful ministry/service experiences has emerged among study samples of women religious, students, and adolescents (Duffy & Sedlacek, 2010; Kreis & Diaz, 2021; Krok et al., 2021; Vieten & Lukoff, 2022). Additionally, one can recognize Park’s (2010) tenets in the content of the 50 items of the Life Satisfaction Scale for Apostolic Women Religious (LSSAWR), designed particularly for this population (Kreis, 2010; 2012). Of course, there are many other psychological assessments/instruments designed to assess these aforementioned life aspects separately within the general population (Diener, Emmons, Larsen, & Griffin, 1985; Gordon, 2017; Paloutzian & Ellison, 1982; Schumm, Nichols, Sheetman, & Grigsby, 1983; Vieten & Lukoff, 2022). However, the LSSAWR (Kreis, 2010; 2012), is a unique instrument. It offers the opportunity to assess concurrently these
varied human life aspects with only one instrument among Roman Catholic apostolic women religious (aka: Sisters). As such, the LSSAWR has the ability to assess a Sister’s life, work, spiritual, and commitment satisfaction levels individually as well as communally within one and/or many congregations of apostolic women religious worldwide (Maria Clara Kreis, March 27, 2018; Kreis, Crummmond, & Reynolds, 2018). In addition, the LSSAWR can be used to assess life satisfaction across the lifespan of women religious (Erikson, 1959; Kreis, 2010). In fact, research on the LSSAWR and other research have shown that life satisfaction increases with age (Angelini, Cavapozzi, Corazzini, & Papagnella, 2012; Kreis, 2012).

Currently, the LSSAWR (including the Manual) is available in English, Spanish, and German (Kreis, Crummmond, & Reynolds, 2018; 2019; 2019), and has been normed to three different cohorts, namely the Silent, Boomer, and Generation X (Strauss & Howe, 1991) generations. Furthermore, the LSSAWR has been used by Sisters located on every continent and in many countries of the world (Maria Clara Kreis, March 27, 2018). These apostolic or active women religious are committed to a life of private and communal prayer and community living, which inspires and sustains their social justice outreach to those most vulnerable and on the margins of society and world (Kreis & Diaz, 2021). However, since the 1960s, there has been a steep membership decline, and therefore Sisters are seeking new scenarios to transition their lives inter- generationally into a viable future (Gittins, 2015; Hereford, 2019; O’Murchú, 2016).

1.2 Background

Historically and worldwide, apostolic women religious have been able to afford their living and ministries (charitable and corporal works of mercy) through their continuous intergenerational membership (Hereford, 2014). Many congregations within the Global North have offered their altruistic services for more than a century (Ebaugh, Lorence, & Saltzman Chafetz, 1996). Nevertheless, the steep membership decline over five decades was a result of huge numbers of women who have left religious life, followed by a lack of new entrants. Smaller new entrant cohorts initially replaced large entrant cohorts, and over the last two to three decades, a majority of U.S. women religious congregations did not have any new entrants (Kreis, 2010). A few congregations, who belong to the Leadership Conference of Women Religious, tend to have one entrant per year or every other year. Overall, this trend has led to a membership composition, in which the older age cohorts outnumber the new and/or younger members within congregations of the Global North (including the U.S.).

Thus, it will be important to find avenues, in which the hopes and dreams of each generational cohort can be shared, within and among the women religious congregations who are currently undergoing major transitions in the various aspects of their lives (Kreis, 2020; Kreis & Crummmond, 2019; Kreis, Crummmond, & Lunz, 2016). The mere fact of membership decline has and continues to bring about changes that are affecting their life form and philanthropic mission to be of service to those marginalized in society. Many communities in the Global North already had to divest themselves of property, buildings, and long established corporate ministries. It will be crucial for these women to engage in honest, courageous, and compassionate conversations as they listen to each other’s visions for their preferred future, particularly those aspirations that are percolating in the hearts and minds of the younger age cohorts (Dunn, 2017; Kreis, 2020; Kreis & Crummmond, 2019).

1.3 Uses of the LSSAWR

As part of the funding for the International LSSAWR Project, Congregational Reports (CRs) were provided to the leaders of participating congregations worldwide (Maria Clara Kreis, November 5, 2019). Congregations of women religious have used the LSSAWR results from their CR for strategic planning. Alternatively, Sisters have used their own LSSAWR scores as a reflective tool to guide personal, communal involvement, professional, and spiritual development across the lifespan (Kreis et al., 2018). In either case, the anonymous and confidential process offered the opportunity for members of different age cohorts to express honestly their personal and communal assessment as related to the current state of their congregation, and it also offered insights for the potential planning as they seek their preferred future. (Campbell, Campbell, Sedor, & Twenge, 2015; Maria Clara Kreis, November 5, 2019). In addition, expanding the LSSAWR to include two additional language versions allowed for the participation of congregations from varied ethnic/racial backgrounds and age cohorts worldwide (Kreis et al., 2018; 2019; 2019).

As the oldest and largest age cohort of the Silent Generation is approaching their last stage in life, it will be the responsibility, foresight, and vision of the younger age cohorts to plan for their desired and viable future (Campbell et al., 2015; Kreis & Bardwell, 2011; Kreis et al., 2016). The CR generated by the LSSAWR research team (https://ctu.edu/thriving-in-ministry) present the aggregated and intergenerational scores of the membership of one congregation on the core elements of religious life (Kreis, 2010; 2012). The confidential and aggregated results and score interpretations presented in a CR can assist the membership in identifying and developing goals
and objectives as they seek a viable future. Several Congregations of women religious who used the results presented in their CR as a baseline measure for developing their strategic plan, decided to repeat their participation in the International LSSAWR Project, which resulted in a second CR (Maria Clara Kreis, November 5, 2019). The second CR was used to evaluate their congregation’s change and progress in fulfilling their strategic plan. With future funding, it would be preferable to offer the congregational membership three CRs by establishing a baseline, pre-and post-assessments of transformational growth over a period of three years.

While the LSSAWR can be used as one criterion to inform a congregation’s mission and the care of its members across the life span, the instrument can also be used as a helpful tool for Sisters in transition (e.g., initial/ongoing formation, change in ministry, local living, elder care, etc.). In fact, Sisters who have completed the anonymous and confidential survey received both their total score and scores on each of the five domains on the LSSAWR. Scores were available online once the survey was completed. For example, a Sister’s total average score might be at 4.22 out of a maximum of 5 (high satisfaction), which represents her general level of satisfaction with religious life. Domain scores provide information about a Sister’s satisfaction with specific aspects of religious life. For example, a “Direction of the Congregation” domain score reflects a Sister’s satisfaction on issues specific to their congregation, such as direction, charism, leadership, and mission. Finally, women discerning their call to religious life and the formation personnel can use this tool to assist the discernment process at the various stages of formation.

1.3.1 Qualitative Feedback on the Use of Congregational Reports (CRs)

Worldwide the leadership teams of religious congregations have reported on the positive impact that the LSSAWR had on the members individually (individual scores) and as a congregation (aggregated scores) (Maria Clara Kreis, November 5, 2019). Actually, the leadership of women religious congregations felt that the CR offered a time and cost-effective assessment on the overall satisfaction levels of their members as well as across the five sub dimensions of religious life (Maria Clara Kreis, March 27, 2018). They also appreciated that it offered a simultaneous and confidential voice of all current age cohort groups within religious life (Maria Clara Kreis, November 5, 2019). In fact, the leadership of congregations expressed a great interest not only in the overall satisfaction levels of their membership but also in the information on any potential age cohort differences across and within the five sub dimensions of the LSSAWR (Maria Clara Kreis, November 5, 2019; Kreis et al., 2018).

Women religious also reported the successful use of the CR in the development of a comprehensive and directional strategic plan for their preferred future (Maria Clara Kreis, November 5, 2019). Unfortunately, discontinued grant funds hindered the ability to offer women religious congregations additional follow up assessments. However, leadership of congregations, who did receive the two CRs, reported on the benefits of the feedback on the varied trends, changes, and transformation that took place within the time span between the first and second reports.

1.4 Purpose of the Current Study

The purpose of the current study was to determine how generational cohorts impact overall life satisfaction and satisfaction with core aspects of religious life (e.g., community prayer and living, and ministry) among women religious as measured by the LSSAWR.

2. Method

2.1 The Instrument

The LSSAWR was developed to measure life satisfaction among women religious (Kreis, 2010; 2012). Briefly, the LSSAWR and its Manual is the first instrument designed to assess satisfaction with religious life of Roman Catholic apostolic women religious. It is available in three languages: English, Spanish, and German (Kreis et al., 2018; 2019; 2019). The scale consists of 50 multiple-choice items for which respondents use a 5-point Likert scale ((1) “very dissatisfied” to (5) “very satisfied”) to rate their satisfaction with various aspects of religious life and its charism/mission. The 50-item scale assesses life and ministry satisfaction among women religious across five established domains: Congregational Character, Individual Well-Being, Membership Viability, Holistic Growth and Commitment, and Inter-Relationships. Details concerning item development for the scale are described in Kreis (2010). Additionally, psychometric analyses supporting the factor structure as well as test-retest reliability are described in Kreis (2010), Kreis (2012), and Kreis et al. (2018). Finally, a measurement invariance (MI) study that provides evidence for comparison of mean scores across domains, as well as total score, among generational cohorts is described in Moore and Kreis (2021).
The Examiner’s Manual for the LSSAWR (Kreis et al., 2018) provides descriptive information concerning the five dimensions, which are summarized here for convenience. Congregational Character items assess satisfaction on issues specific to a sister’s congregation. These include the direction, charism, mission, and leadership. The Individual Well-Being items assess awareness of personal characteristics and general suitability for religious life. Membership Viability items assess satisfaction with personal and communal commitment toward initial and lifelong formation. The Holistic Growth and Commitment items assess satisfaction with personal and professional growth and commitment to religious life. Finally, the Inter-Relationships and Individual Well-Being items assess a Sister’s satisfaction with personal and peer friendships within her community (internal) and friends, family and coworker relationships (external). Items within each domain are summed to create a total score for that dimension. Then, individual dimension scores are combined to calculate an overall satisfaction score.

The number of items on each dimension differ, therefore, the maximum possible score for each dimension differs; Total Score (max = 250), Congregational Character (max = 65), Individual Well-Being (max = 45), Membership Viability (max = 45), Holistic Growth and Commitment (max = 65), and Inter-Relationships (max = 30). Results from the MI study by Moore and Kreis (2021) revealed that the Individual Well-Being and Inter-Relationships dimensions were not statistically distinguishable for the Silent generation. Therefore, when comparing generational cohorts, the two dimensions were combined. This resulted in a maximum possible score of 75 for this combined ‘sense of belonging and relationships’ dimension.

2.2 Sample

LSSAWR data was collected in three waves across 13 years. The first wave of data collection (2008-2009) was completed in the United States and provided the initial data for the preliminary psychometric analysis. The second wave of data collection (2016-2020) was begun with the goal of extending the LSSAWR to a younger, and more international group of women religious worldwide. Participation in this International LSSAWR Project was solicited through a wide variety of organizations, conferences, and other entities, which support women religious. The word of mouth, by participants and leadership teams of Roman Catholic women’s religious congregations worldwide also influenced an increased participation. The third wave of data collection was attempted in 2021 with the goal of providing evidence for a gender-inclusive version of the survey (e.g.: replacing her/she with they/theirs) to expand use of the LSSAWR to men religious (https://ctu.edu/thriving-in-ministry).

Responses from the second wave of data collection (2016-2020), a study sample described in detail in Moore and Kreis (2021) were used for this current study. Participants encompassed a sample of international Catholic Sisters known as active women religious. Active women religious are women religious who through their vows of poverty, chastity, and obedience promise a permanent commitment to God within their respective congregations. Women religious are committed to apostolic and charitable works and follow the specific constitution or rule of life of their congregations. (Glazier & Hellwig, 2004). Overall, this mostly self-selected sample of Roman Catholic women religious from the Global North and South is homogenous concerning their chosen lifestyle but not necessarily based on factors such as socioeconomic status, educational, occupational, and racial/ethnic backgrounds.

Some participants reported anecdotally that they took the survey more than once to see if their satisfaction level changed over time. Other participants noted they experienced technological problems while taking the survey and much of their data was missing. Thus, prior to analysis, the data was examined and cleaned. This process included the removal of duplicate cases (i.e., from the same individual) or cases with significant missing data. Two cases were considered duplicates, if responses came from the same IP address and had the same demographic information (e.g., year of birth, year entered religious life, year of first commitment, etc.). In these instances, responses were retained for the first time the participant completed the survey. Using this process, 105 cases were removed as duplicates and another 125 cases were removed due to significant missing data. This resulted in a potential sample of 1890 participants.

2.3 Variables

Along with responses to the items for each dimension, the scale also collected personal descriptive information for each participant such as date of birth, years in religious life, race/ethnicity, level of education, and survey language. To create the variable of interest in this study, generational cohort based on the generation theory (Campbell et al., 2015; Howe & Strauss, 2007; Strauss & Howe, 1991) was applied and participants were divided into four generational cohorts based on their reported year of birth; Silent (1925-1942), Boomer (1943-1960), Generation X (1961-1981), and Millennial (1982-2004).
Prior research has demonstrated age and generational differences in life satisfaction within religious life (Kreis, 2010; 2012; Kreis & Bardwell, 2011; Kreis et al., 2016; Kreis et al., 2018). However, age and generational cohort were interdependent since age was the defining characteristic for generational cohort. Since generational cohort was the focus of this study, age was considered redundant even though it was a significant predictor. Anecdotally, years in religious life emerged as a potential predictor of life satisfaction. However, years in religious life and age were very highly correlated ($r = 0.957$, $p < 0.001$) and multicollinearity tests confirmed the redundancy of these two variables when used in the same model. Unfortunately, since the sample did not have many participants who joined religious life at later stages in their lives, the available data did not afford the inclusion of this variable or investigation of this phenomenon.

Additionally, a potential predictor variable was survey language. However, survey language did not emerge as a significant predictor. Related to survey language was ethnicity, which was also investigated as a potential predictor variable. However, the ethnicity categories for the Spanish and English survey versions differed from the ethnicity categories for the German survey version. This was at the request of those who reviewed the German survey prior to administration. Therefore, no consistent ethnicity variable existed for use in the model.

Finally, prior research indicated that elder generational cohorts lagged in obtaining advanced educational degrees. In contrast, younger age cohorts either joined religious life with advanced degrees or were supported during their initial formation period by their congregations in completing advanced educational degrees (Kreis et al., 2016). Therefore, level of education was considered as a covariate, especially as a potential factor to explain any differences observed between younger and elder cohorts. However, this variable was not a significant predictor when included in the model.

2.4 Analysis

Choosing the best method of analysis to answer the research question using the available data required consideration. Because Sister-participants were nested within their congregation, there was the question of accounting for the clustering during the analysis, especially given that congregations did their own recruitment. Hierarchical linear models (HLMs) or multilevel models (MLMs) allow researchers to account for this non-independence of observations and have become increasingly popular in recent years within educational and psychological research (e.g., Huang, 2016; McNeish & Stapleton, 2014; Raudenbush & Bryk, 2002). However, just as with ANOVAs, HLMs and MLMs come with underlying assumptions and violation of these model assumptions can cause bias in estimates and, thus, interpretations (Hox, 2010; Raudenbush & Bryk, 2002).

2.4.1 Model Assumptions

Clustering is important to consider because analysis of variance (ANOVA) and regression models rely on the underlying assumption of independence of observations (Clarke, 2008; Glass & Hopkins, 1996; McCoach & Adelson, 2010). When samples are drawn from clustered data, such as Sisters from congregations, the assumption of independence of observations may be violated due to some shared similarity or influence among those living and/or ministering together compared to a sample drawn from the population at large (Bliese & Hanges, 2004; Clarke, 2008; Cohen, Cohen, West, & Aiken, 2003; Moerbeek, 2004; Raudenbush & Bryk, 2002).

The Interclass Correlation Coefficient (ICC) provides an estimate of the variability due to clusters in the data and, thus, importance of using a model capable of accounting for clustering (Clarke, 2008; Huang, 2016; Raudenbush & Bryk, 2002). Much work was previously done with ICCs and researchers in the past have suggested that ICCs less than 0.10 or 0.05 indicated negligible non-independence and that clustering could be ignored in these cases (e.g., Hayes, 2006; Nezlek, 2008; Thomas & Heck, 2001). For reference, within educational contexts, it has been shown that elementary and secondary schools have an average ICC of roughly 0.22 (Hedges & Hedberg, 2007). However, more recent studies have shown that even small ICCs can indicate substantial dependence of responses that requires accommodation for nesting (Huang, 2018; Snijders & Bosker, 2012). Thus, ICCs were calculated for the total score and each individual domain score from the current data set and ranged from 0.13 to 0.19. These indicated the potential for non-negligible non-independence of observations due to clustering. Therefore, it was determined that congregational clusters needed to be considered during the data analysis.

Sample size for the number of level-2 units (e.g., congregations) and level-1 units (e.g., individual sisters) was considered. Specific guidelines in the literature for sample size are varied and dependent on the focus of the analysis and the parameters of the simulation studies from which they emerge (Bell, Morgan, Schoeneberger, Kromrey, & Ferron, 2014). Current general guidelines suggest a 30/30 configuration (McNeish & Stapleton, 2014). This translates to 30 congregations with 30 sisters each relative to the current study. However, in a comprehensive review of literature, Dedrick, Ferron, Hess, Hogarty, Kromrey, and Lee (2009) found almost
25% of published studies did not follow these guidelines. These authors, as well as others, (e.g., Bell et al., 2014; McNeish & Stapleton, 2014) have noted that the lack of conformity with sample size guidelines may be due to logistic constraints (e.g., financial, limited availability, time). Further, evidence shows that having the requisite number of level-2 units may be more consequential than having the requisite number of level-1 units, within limits (Bell et al., 2014).

To draw the final sample for this study, as many of the parameters outlined above were addressed. Ultimately, a final sample of 1701 Sisters affiliated with 33 congregations from the second wave of data collection was used for the study. Sisters per congregation ranged from 22 to 231. Not all congregations had all four generational cohorts represented within the sample from their congregation. This is particularly true of the Millennial generation. In addition to some congregations lacking a similar proportion of participants from the cohort, the Millennial age cohort does not include the full age range representation because those born between 2002-2004 would not be old enough to consider the life commitment to religious life (Table 1).

Table 1. Age range and number of respondents for each cohort in final study sample

<table>
<thead>
<tr>
<th>Generation</th>
<th>n</th>
<th>Birth Years</th>
<th>Age range in 2016</th>
<th>Age range in 2020</th>
<th>Age range during data collection window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silent</td>
<td>649</td>
<td>1925-1942</td>
<td>74-92</td>
<td>78-95</td>
<td>74-95</td>
</tr>
<tr>
<td>Boomer</td>
<td>598</td>
<td>1943-1960</td>
<td>56-73</td>
<td>60-77</td>
<td>56-77</td>
</tr>
<tr>
<td>Millennial</td>
<td>128</td>
<td>1982-2004</td>
<td>[12]-34</td>
<td>[16]-38</td>
<td>[12]-38</td>
</tr>
</tbody>
</table>

[] denotes age not yet eligible for commitment to religious life

Finally, MLMs, like ANOVAs have the assumption of homogeneity of variance and the assumption of normality of the dependent variable (Dedrick et al., 2009). While the model is fairly robust to violations of normality, if the assumption of homogeneity of variance is violated, estimates can be biased (Dedrick et al., 2009). However, newer versions of most statistical programs allow the user to perform ANOVAs and MLMs using various types of covariance matrices (e.g., unstructured, auto-regressive), and type of sum scores, to accommodate this violation (Kincaid, 2012). While each alternate type of covariance structure does require additional degrees of freedom, this is not an issue when sample sizes are large enough. Thus, a test for the assumption of homogeneity of variance was performed for total life satisfaction score as well as each individual domain score. The Congregational Character domain scores and the Inter-Relationships and Individual Well-Being domain scores both violated the assumption of homogeneity of variance. Therefore, all analyses were performed using an unstructured covariance matrix to accommodate the violation and to maintain analytic consistency across all models.

3. Results

Results of the multilevel model for overall life satisfaction score followed by results for each domain score are presented first; then results are summarized. After summarization, a descriptive presentation of average item ratings is presented to illustrate patterns in ratings between generational cohorts. Estimated means and standard errors for total score and all domain scores are included in Appendix A.

3.1 Total Life Satisfaction Score

The total life satisfaction score among generational cohorts was significantly different (F (3, 1697) = 47.69, p < 0.001). Bonferroni post hoc adjustments were made for multi-comparison of main effects for generational cohort and showed the Silent generation had significantly higher overall life satisfaction scores compared to the Boomer cohort (mean diff = 10.39, p < 0.001), the Generation X cohort (mean diff = 16.12, p < 0.001), and the Millennial cohort (mean diff = 17.35, p < 0.001). Additionally, the Boomer cohort had significantly higher overall life satisfaction scores compared to the Generation X cohort (mean diff = 5.73, p = 0.002) and the Millennial cohort (mean diff = 6.96, p = 0.013). However, overall life satisfaction scores for the Generation X cohort were not significantly different from the Millennial cohort scores.

3.2 Domain Scores

Congregational Character domain scores among generation cohorts were also significantly different (F (3, 1697) = 67.84, p < 0.001). Bonferroni post hoc adjustments for multi-comparison of main effects were performed and revealed that the Silent generation had significantly higher Congregational Character domain scores compared to the Boomer cohort (mean diff = 4.10, p < 0.001), the Generation X cohort (mean diff = 6.34, p < 0.001), and the
Millennial cohort (mean diff = 6.66, p < 0.001). Additionally, the Boomer cohort had significantly higher scores compared to the Generation X cohort (mean diff = 2.24, p < 0.001) and the Millennial cohort (mean diff = 2.55, p = 0.004). Again, the Generation X cohort scores were not significantly different from the Millennial cohort’s scores.

Membership Viability domain scores were also significantly different among generational cohort (F (3, 1697) = 19.32, p < 0.001). Bonferroni post hoc adjustments for multi-comparison of main effects showed, again, the Silent generation had significantly higher membership viability scores compared to the Boomer cohort (mean diff = 2.27, p < 0.001) and the Generation X cohort (mean diff = 1.88, p < 0.001). However, unlike other domain scores, the Millennial cohort had significantly higher scores compared to the Boomer cohort (mean diff = 1.92, p = 0.003). No other significant differences among the cohorts were found.

Holistic Growth and Commitment scores among the generational cohorts were significantly different (F (3, 1697) = 22.73, p < .001). Bonferroni post hoc adjustments for multi-comparison of main effects for generational cohort were performed and revealed the Silent generation had significantly higher scores than the Boomer cohort (mean diff = 1.49, p < 0.001), the Generation X cohort (mean diff = 2.82, p < 0.001), and the Millennial cohort (mean diff = 3.67, p < 0.001). Additionally, the Boomer cohort had significantly higher scores compared to the Generation X cohort (mean diff = 1.34, p = 0.010) and the Millennial cohort (mean diff = 2.19, p = 0.002). Again, the Generation X cohort scores were not significantly different from the Millennial cohort’s scores.

The Inter-Relationships and Individual Well-Being combined score among generations was significantly different (F (3, 1697) = 46.71, p < .001). Bonferroni post hoc adjustments for multi-comparison of main effects for generational cohort showed the Silent generation had significantly higher scores compared to the Boomer cohort (mean diff = 2.53, p < 0.001), the Generation X cohort (mean diff = 5.13, p < 0.001), and the Millennial cohort (mean diff = 6.67, p < 0.001). Additionally, the Boomer generation had significantly higher scores compared to the Generation X cohort (mean diff = 2.60, p < 0.001) and the Millennial cohort (mean diff = 4.14, p < 0.001). Scores for the Generation X cohort were not significantly different from the Millennial cohort’s scores.

### 3.3 Summary of Domain Score Comparisons

A summary of the significant comparisons can be found in Table 2. The Silent generation had significantly higher scores than any other generational cohort overall and for individual domains with the exception of the Membership Viability domain. For this domain, their scores were not significantly different from the Millennial cohort scores. Additionally, the Boomer cohort had significantly higher total scores and individual domain scores compared to the Generation X and Millennial cohorts except, again, when comparing Membership Viability scores. In this case, the Boomer cohort had significantly lower Membership Viability scores compared to the Millennial cohort. The Boomer cohort and Generation X cohort did not differ significantly on Membership Viability. Scores for the Generation X cohort were not significantly different from scores for the Millennial cohort when comparing total life satisfaction or any of the individual domain scores.

### 4. Discussion

The outcomes of this study support the use of results from the LSSAWR within and across congregations of women religious locally, nationally, and internationally to examine differences in life satisfaction and core aspects of religious life among generational cohorts. In fact, the LSSAWR (total/sub score) can offer a meaning-making framework, whereby women religious (individually/communally) can use this instrument periodically as they assess their overall well-being (satisfaction levels) in this life commitment. Based on Park’s (2007) research, a meaning system framework can offer a beneficial method when attempting to conceptualize compelling and “multidimensional influences of R/S [religion/spirituality] on individuals’ health and well-being.
“Consequently, the LSSAWR offers this meaning-making framework, as the 50 items of the LSSAWR emerged from Sister-participants’ research responses, about their motivations to join and remain in religious life (Kreis, 2012; Kreis & Bardwell, 2011). As such, the LSSAWR is reflective of Sisters’ inherent beliefs, objectives, and commitment to charism/mission as related to this particular life form. Furthermore, the general pattern that life satisfaction increases with age, found in this study, was also observed when conducting generational cohort comparisons among women religious worldwide (Kreis, 2010; 2012). As such, satisfaction with life was higher among the elder generational cohorts (Angelini et al., 2012). Moreover, allowing for continued confidentiality of participating congregations, aggregate data from the LSSAWR affords the opportunity to explore and report on national/international trends concerning the current state of and transformation in life satisfaction and various aspects of religious life. The information resulting from the use of the LSSAWR can be informative not only to women religious themselves but also to organizations and others who support the life and mission of Catholic Sisters worldwide.

A multilevel model analysis was performed on overall life satisfaction scores as well as the five individual domain scores, Congregational Character, Membership Viability, Holistic Growth and Commitment, and Inter-Relationships and Individual Well-Being, as measured by the LSSAWR. Due to model constraints, responses from a multi-generational and international sample of 1701 sisters representing 33 congregations, captured between 2016 and 2020, were used to determine if generational differences existed in scores. While some exceptions were observed, generally, trends showed that older generational cohorts were more highly satisfied overall and with various aspects of religious life and ministry/work compared to younger generational cohorts. This trend was particularly strong and statistically significant for the Silent and Boomer generations. One notable difference was the significantly lower Membership Viability scores for the Boomer generation compared to the Millennial generation.

These latter results may be explained by the fact that the Boomer generation is likely the most involved generation in the life of their congregations through positions of elected, appointed, or self-selected leadership services. This may result in greater levels of insecurity or disillusionment as related to the unknown future of religious life as compared to any other generation cohort around them. The lack of newer and younger members might increase their dissatisfaction and insecurity about the future of their own communities. Non-significant differences in Membership Viability scores between the Generation X and Boomer cohorts could be explained by where they are in their journey. Younger Generation X Sisters might be completing the final steps of their initial formation programs and/or establishing their ministry focus. On the other hand, older Generation X Sisters might struggle to balance their time and energy regarding commitment to their ministry, prayer, community, and social life (e.g., time to visit/attend to the needs of their elder parents and/or elder Sister-friends). Instead, the Millennial cohort may be more focused on their personal call to religious life and in determining their correct placement within a congregation of women religious. Therefore, they are not as involved regarding the evaluation of their community’s vocation/formation programs. Alternately, the Silent Generation is experiencing less involvement regarding vocation/formation programs and declining well-being that shifts their focus on what is most essential as they continue to live and witness their commitment to religious life during this last phase. Therefore, congregations, who rely solely on members from the Silent Generation for their local, national, and international leadership, might encounter potential ethical challenges regarding the sustainability and vitality of their future. Instead, a compassionate engagement in courageous and honest conversations within their own and across memberships of a congregation of women religious, and with other supportive organizations might offer new insights and guidance. Recent news has indicated that there are congregations, who audaciously requested a pontifical commissary for their aging congregations (Stockman, January 13, 2022). Nonetheless, other congregations are strongly encouraged to engage in deeper conversations and in the evaluation of their trust and support of their younger members to lead their congregations into an imaginable and vital future. While these conversations can be very difficult, they are critical and with the support of the LSSAWR and qualified facilitators, they could offer an essential path forward.

Furthermore, in keeping the confidentiality of participating congregation, the ability of the LSSAWR to aggregate data, allows the LSSAWR research team to explore and report on national/international trends, meaning on the state and changes (transformation taking place over time) within the various aspects of religious life. The information resulting from the use of the LSSAWR can be enlightening not only to religious themselves but also to organizations and others who support the life and mission of Catholic Sisters worldwide. Currently, the LSSAWR and its Manual are available in three languages, and participants can receive their individual LSSAWR total and five sub scores online. In collaboration with the LSSAWR research team and upon the completion of the LSSAWR online by a sufficient number of Sisters from one congregation, the
leadership team of that particular congregation can request a CR. It would be more cost efficient for each congregation, if the LSSAWR was continuously funded through an established fund, and thus accessible to apostolic women religious nationally/internationally.

Strikingly, the results within this paper have indicated that the LSSAWR can also confidently offer generation cohort comparisons within and across congregations worldwide pertaining to the LSSAWR total score and its sub scores. However, previous research (Moore & Kreis, 2021) has indicated that two (Inter-Relationships and Individual Well-Being) of the five sub scales scores will need to be combined when conducting generation comparisons of all age cohorts within and across congregations worldwide. While it is possible to conduct comparisons across the younger age cohorts on the LSSAWR total and five sub scores within and across congregations, it is strongly recommended to combine the aforementioned two of the five sub scores when engaging in generation comparisons that include the eldest age cohort within religious life.

Finally, the LSSAWR and the associated CRs have been used as a cost-effective and time efficient instrument for women religious to assess their personal and their congregation’s well-being as they monitor progress toward fulfillment of strategic goals. Congregations who are challenged regarding the sustainability and vitality of their future, can use results from the LSSAWR and associated CRs as follows: Firstly, to engage in honest conversations within their own and across memberships of women religious congregations, and with other supportive organizations. Secondly, to evaluate their trust in and support of their younger members to lead their congregations into an imaginable and vital future. Additionally, women in the initial stages of formation and in collaboration with the formation and leadership team can use their individual LSSAWR scores as one resource to assess the vocational call and fit to this particular congregation. Likewise, Sisters as a part of their ongoing formation and especially in transitional periods of their life can reflect on personal, communal, and professional goals using their individual LSSAWR results.

4.1 Limitations
Sample sizes for the four generational cohorts reflected the national trend of a general decline in women religious orders over time (CARA, 2018). Thus, not all generational cohorts were represented within each congregational cluster, especially the Millennial cohort. Additionally, it may be that caution is warranted when interpreting the lack of statistically significant differences between the Generation X and Millennial cohorts. The two younger age cohorts are very diverse in their racial and ethnic backgrounds as compared to the two older cohorts who are more homogenous ethnically and racially. Of those who have participated from the Global North, many joined religious life in their late 20s or at an older age compared to those from the Global South who tend to enter this life form at a younger age. Despite age differences, younger participants from Generation X and older participants within the Millennials cohort were most likely in the initial stages of formation within religious life as they completed the LSSAWR. Thus, their experience within religious life would be more similar and novel as compared to the involvement within religious life of the elder two age cohorts who have been in religious life for decades. Even though the formation programs across congregations may differ, newer members are less likely to be fully involved in all aspects of religious life when compared to the sisters of the older age cohorts. In addition, since many are not yet of age to be in a commitment, the full age range of the Millennial cohort is not represented in the data and attenuates the investigation of generational comparisons until data which includes the full age range can be collected.

It was surprising that most variables, unavoidable issues with the ethnicity variable notwithstanding, were not significant predictors in the model despite variation in the responses among sisters. Additionally, studies show that omitting essential variables from a model can cause bias in estimation of effects (Kim & Frees, 2006). So, there could be variables, especially at the congregation level, that would impact the analysis that were not collected and available for use. It is common knowledge that congregations differ in size, geographic location, and resources. Any of these variables could have impacted the analysis if they were collected and available for analysis. Further, the lack of a standardized ethnicity variable in the second wave of data collection means it is unknown if that variable would have been impactful. However, the striking homogeneous commitment to religious life and charism/mission underlying the sample could not only account for the lack of prediction by traditional variables but may also ameliorate the omission of variables.

4.2 Summary
Results of this study provide evidence of generational cohort differences among women religious in total life satisfaction and individual domains related to core aspects of religious life as measured by the LSSAWR. To this point, women religious worldwide have provided positive feedback that the LSSAWR offered a cost-effective and time efficient tool for receiving feedback on their individual and communal growth and desire to live and
witness a joy-filled commitment to religious life. Women religious can use the LSSAWR individually throughout their life commitment in religious life, and communally across age cohorts to plan for their preferred viable and vital future. As such, the LSSAWR can be used as a resourceful tool to facilitate important and transformative processes within and across generation cohorts of women religious congregations worldwide. The LSSAWR results can facilitate deep listening as questions are raised globally within and across congregations such as: What is most important to each generation? What kind of responsibility, willingness, and commitment does each generation cohort have as they collaborate to create their preferred future in the here and now?

Acknowledgments
This research was funded as a part of the Thriving in Ministry grant from the Lilly Endowment to Catholic Theological Union in support of developing research and programming on behalf of the integral thriving of all Catholic professionals in ministry. The data (2016-2020) used within this project was grant funded by the Conrad N. Hilton Foundation and supported by Duquesne University.

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Life Satisfaction Scale for Apostolic Women Religious (LSSAWR) website. Retrieved from https://ctu.edu/faculty/maria-clara-kreis


### Appendix A

#### Table A1. Estimated means and standard errors by cohort and score

<table>
<thead>
<tr>
<th>Generational Cohort</th>
<th>Total Life Satisfaction Score mean</th>
<th>s. e.</th>
<th>Congregational Character mean</th>
<th>s. e.</th>
<th>Membership Viability mean</th>
<th>s. e.</th>
<th>Holistic Growth and Commitment mean</th>
<th>s. e.</th>
<th>Inter-Relationships/Individual Well-Being mean</th>
<th>s. e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silent</td>
<td>208.63</td>
<td>0.91</td>
<td>54.62</td>
<td>0.30</td>
<td>33.42</td>
<td>0.22</td>
<td>57.59</td>
<td>0.24</td>
<td>66.00</td>
<td>0.31</td>
</tr>
<tr>
<td>Boomer</td>
<td>198.24</td>
<td>0.95</td>
<td>50.52</td>
<td>0.31</td>
<td>31.14</td>
<td>0.23</td>
<td>53.11</td>
<td>0.25</td>
<td>63.48</td>
<td>0.32</td>
</tr>
<tr>
<td>Gen X</td>
<td>192.52</td>
<td>1.29</td>
<td>48.28</td>
<td>0.42</td>
<td>31.60</td>
<td>0.31</td>
<td>51.77</td>
<td>0.34</td>
<td>60.87</td>
<td>0.43</td>
</tr>
<tr>
<td>Millennials</td>
<td>191.28</td>
<td>2.06</td>
<td>47.96</td>
<td>0.68</td>
<td>33.06</td>
<td>0.50</td>
<td>50.92</td>
<td>0.54</td>
<td>59.34</td>
<td>0.69</td>
</tr>
</tbody>
</table>

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