

# **Empirical Evolution of Child Life**

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#### ABSTRACT

Certified Child Life Specialists are a well-documented component of family-centered care; however, because they typically work as members of multidisciplinary teams, it can be difficult to immediately recognize the scope of their contributions to health care research and practice. As the field continues to grow and evolve, it is even more essential that health care practitioners recognize, implement, and evaluate empirically supported child life services for patients and families across settings. Although the importance of scholarship for practice is well-recognized, there have not yet been any systematic analyses of the child life literature base. Therefore, the purpose of this study was to complete a scoping review of Certified Child Life Specialist authorship, participation, and presence in peer-reviewed journal articles published from 1996 to 2017. Results demonstrate statistically significant increases over time in research that is driven by and focused on Certified Child Life Specialists, as well as emerging trends in populations and interventions studied and the publication outlets in which these articles can be found. These findings highlight that although child life presence in research is increasing, there is more work to be done to improve academic and clinical training related to research, to expand the literature base as it stands, and to advocate for the inclusion of Certified Child Life Specialists in collaborative scholarship to improve psychosocial care for children and families.

Although health care, like any industry, is continuously evolving, a significant shift in the priorities and language of care began with Sackett and Rosenberg's (1996) description of the term "evidence-based medicine" as:

...the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research (p. 71).

Now more generalized to encompass a variety of medical and psychosocial fields, evidence-based practice remains a dominant philosophy that guides health care practice from the bench to the bedside. The achievements of this movement have been multifold, from increasing cure rates and decreasing medical errors to ensuring equitable, high-quality standards of practice that are accessible to patients and families of all needs and backgrounds (Djulbegovic & Guyatt, 2017).

At the same time, the evidence-based medicine movement has presented challenges for fields that rely upon individualized care practices that are difficult to measure, evaluate, and standardize across populations. Certified Child Life Specialists (CCLS) have experienced many of these difficulties firsthand, both in advocating for the needs of patients and families and in articulating their professional scope of practice in multidisciplinary care teams. However, today's health care climate speaks the language of empirical evidence when making decisions about everything from institutional goals and initiatives to departmental staffing or budgets, right down to direct patient care (Smith et al., 2011). Therefore, to be effective clinicians and advocates for patients, families, and health care institutions, practitioners must be intimately knowledgeable not only about the evidence that supports their interventions, but also the trends and gaps that merit further investigation.

To date, a systematic evaluation of child life research has not yet been conducted. Since the establishment of the Child Life Council in 1982 (Wojtasik & White, 2018), several initiatives and training requirements have been put into place to encourage research knowledge, participation, and implementation among Certified Child Life Specialists. Some of these efforts have been broad, such as including research-related content at annual conferences, establishing research-oriented columns in the organizational publication, striking a formal research and scholarship committee to capitalize on expert knowledge and experiences in the organization, and — most recently — the addition of a research methods course to the academic requirements for child life certification (Association of Child Life Professionals, 2018). Thus, the time is ripe to evaluate the presence and progression of child life research to inform clinical practice, academic training, advocacy, and research efforts moving forward. Therefore, the purpose of this study was to complete a scoping review of CCLS authorship, participation, and presence in peer-reviewed journal articles published from 1998 to 2017.

# Methods

The current review is considered a scoping review, as it focuses primarily on the extent of information available relevant to the topic of child life specialists. There is no attempt to evaluate the quality of the research included in the review. This review is useful as it allows for the exploration of publications in peer-reviewed journals for evidence of the scope of practice and evidence-based practice relevant to the child life profession over a 20-year period (1998-2017).

To assess the state of child life presence in published research, a systematic literature review was conducted using Novanet, CINAHL, PubMed, and ProQUEST databases. Specifically, a scoping review approach, which aims to "clarify working definitions and conceptual boundaries of a topic or field" (Peters et al., 2015; p. 141) was chosen as "scoping reviews are particularly useful when a body of literature has not yet been comprehensively reviewed, or exhibits a complex or heterogeneous nature not amenable to a more precise systematic review of the evidence" (p. 141). Given the variability of child life practice settings and intervention characteristics, a scoping review was most appropriate for examining this diverse and emerging literature base. Therefore, the search terms used included "child life specialist," "child life therapist," and "CCLS" to ensure a broad spectrum of coverage and a unifying concept for the inquiry. Articles included for review met the following eligibility criteria: 1) date of publication between January 1, 1998 and December 31, 2017; and 2) categorized as peer-reviewed, which was inclusive of empirical, theoretical, and conceptual articles. Editorial articles, editor's columns, book reviews, personal/reflective pieces, conference proceedings, and conference abstracts were excluded from review. Once duplicate and non-peer-reviewed results were eliminated, a total of 273 articles were eligible for analysis. Each article was downloaded, cataloged, read, and coded by two separate members of the research team; all analyses were conducted using Microsoft Excel and statistical support.

Novanet (http://www.novanet.ca/) is an advanced search engine available through a consortium of libraries in the Maritime Provinces in Canada (Nova Scotia, New Brunswick, and Prince Edward Island). In total, there are 315 databases included in Novanet. On September 9, 2018, an initial database search was performed using the search terms "child life specialist," "child life therapist," and "CCLS." Following application of the filters "search beyond my institution," "peer-reviewed," "and sort by date (newest to oldest)," 1,039 hits were included for the present review. The initial review of titles, abstracts, authors, and highlighted key words resulted in the inclusion of relevant articles for review. A systematic exclusion based on this review removed 860 hits that were non-English language, not peer-reviewed articles (e.g., conference proceedings, magazines or abstracts, duplicates, or not relevant to the topic at hand). The resulting body of articles identified via Novanet for coding was 179, reflecting the narrow scope of the topic of interest. (Figure 1)

Recognizing the limitations of the Novanet search, the authors followed up with a database search using CINAHL, PubMed, and ProQuest via Vanderbilt University database on September 27, 2018, using the same search terms and strategy. The CINAHL search resulted in the identification of 307 articles. Exclusion of non-relevant, non-peer-reviewed articles (n= 200) yielded an additional 42 articles to the179 originally identified. The PubMed search resulted in the identification of one additional article for review; the ProQuest search added a further 51 articles to the sample. Therefore, the total sample for the coding procedure was 273 articles. A digital copy of each article was saved as a PDF and searched for key content; coding was documented in a shared Microsoft Excel file sorted by year of publication.



Figure 1 Database Search Strategy

# Coding

Primary coding of the articles was completed by the lead author and secondary coding was completed by the secondary author, supported by graduate child life interns. Codes are presented in Table 1. Discrepancies in coding were noted, discussed, and resolved between coders to reach agreement.

Table 1 Codin	g Terms and	d Definitions
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Variable	Definition	Categories
Year of publication	n/a	date
Reference to child life	Articles in- cluded in the sample with a reference to child life therapist, child life specialist, CCLS	Count by year
Child life presence	What level of presence is observed in the article?	<ul> <li>Mention only</li> <li>General description of child life practice</li> <li>Description of CL roles and responsibilities</li> <li>None (e.g., CCLS author, acknowledgement only)</li> </ul>
Area of child life content	What area of child life practice was featured in the article?	<ul> <li>Play</li> <li>Parent support</li> <li>Sibling support</li> <li>Illness/treatment education</li> <li>Preparation/procedural support</li> <li>Assessment</li> <li>Pain management</li> <li>Professional collaboration</li> <li>Bereavement support</li> <li>Other</li> </ul>
Authorship	What level of child life au- thorship was observed in the article?	<ul> <li>First author CLS</li> <li>Contributing author(s)</li> <li>Acknowledgement</li> <li>No child life author reference</li> </ul>
Journal discipline	What general discipline represents the focus of the journal?	<ul> <li>Nursing</li> <li>Medicine</li> <li>Child health &amp; development</li> <li>Psychology</li> <li>Music therapy</li> <li>Art therapy</li> <li>Family sciences</li> <li>Professional studies</li> <li>Other</li> </ul>

#### Analysis

For the variables "reference to child life" and for each category of the variables "child life presence," "area of child life content," "authorship," and "journal discipline," the authors examined the frequency/percentage of articles overall and the frequency/percentage of articles for each individual year across the 20-year time period. To test for significant change over time in the number of articles with reference to child life, a Poisson regression model was fit with the number of articles as the outcome, predicted by year (coded such that 0 is the initial year of 1998 and 19 the final year of 2017). To test for significant differences between categories of child life presence, area of child life content, authorship, and journal discipline, multinomial logistic regression models were fit with the category as the outcome, predicted by year (with year being mean-centered to allow interpretation of intercepts as means). All models were fit in R, using the "glm" function for the Poisson regression model and the multinom function (in the nnet package) for the multinomial logistic regression models.

# Results

The aim of this study was to review published articles for content related to child life practice. In total, 273 articles were selected for review and coding. The frequency/percentage of articles per category, both overall and for each individual year, are documented below for each section. In addition, differences between categories and/or significant change over time is included. <sup>1</sup>

#### **Reference to Child Life**

Published articles included in the study contained a reference to child life ("child life specialist," "child life therapist," and/or "CCLS") and were sorted by year of publication (Figure 2). The number of articles with a reference to child life across all years ranged from three in 1998 to 32 in 2017. The mean number of articles mentioning child life across all years was 13.65.



The descriptive results show that articles identified with a child life specialist reference did increase yearly. To test if this increase was statistically significant, a Poisson regression model was fit predicting the count of publications by year. As shown in Table 2, the statistically significant estimate of the slope of time (0.110) indicates that there was a significant increase in the number of publications with a child life reference per year. The descriptive data indicate that child life presence increased more in the second decade compared to the first. However, using a Poisson regression model, the rate of change between the two decades was found to be nonsignificant.

Table 2 Poisson Regression Model: Reference to Child Life

Regression coefficient	Estimate	S.E.	Z	p-value
Intercept	1.373	0.163	8.405	<.001*
Year	0.110	0.012	9.371	<.001*
Alpha .05				

**Child Life Presence** 

Figure 3 displays the percentage of articles by level of child life presence across all years. Child life was only mentioned (meaning a documented use of "child life specialist" was found in the article's body) in 207 (75.8%) articles in the sample; child life content (child life was mentioned and described in one to two sentences) was included in 39 (14.3%), and only six (2.2%) of the articles featured a child life focus (meaning the article's main topic of focus was a child life role, responsibility, or intervention and was labeled as such). Articles in the sample coded "none" (21; 7.69%) indicate CCLS authors of articles with topics not specific to child life theory or practice.

The descriptive data indicate that child life was indeed mentioned more frequently over time, but that the frequency with which articles focused on or in-

Prior to conducting the multinomial regression analyses to test hypotheses, preliminary random-intercept-only multilevel multinomial logistic regression models were fit to assess author-level and journal-level dependency (as certain journals had multiple articles in the sample, as did certain authors). For each outcome, this model either did not converge, or the author-level and journal-level random intercept variances were small and nonsignificant; we thus opted to perform single-level analyses for parsimony.





Figure 3 Percentage of Articles by Level of Child Life Presence (1998-2017)

corporated child-life specific content has, in truth, decreased. Figure 4 displays the percentage of articles by level of child life presence as a smooth function of year (LOESS curves).

To test if the observed difference in the number of articles with child life presence of none versus other types of child life presence (mention, content, focus) was significant, a multinomial logistic regression model was fit with child life presence category as the outcome and none as the reference class. To test if there was also significant change in the categories of child life presence over time, we included time as a predictor of child life presence. As shown in Table 3, the significant positive intercepts for categories mention and content indicate that these two categories were significantly more likely than none, and the significant negative intercept for focus indicates that none was significantly more likely than focus. Further, the significant and positive slope estimate for mention indicates that, over time, mention became increasingly more likely than none.

Slope Intercept Category of time S.E. p-value S.F. p-value estimate estimate Mention 2.420 0.255 <.001\* 0.117 0.041 .004\* Content 0.727 0.295 .014\* 0.051 0.048 .285 -1.142 0.486 .019 0.144 0.097 Focus .138 Alpha .05

In sum, over time, articles were increasingly more likely to mention child life as opposed to having no child life presence at all; however, there was no change over time in terms of the likelihood an article would focus on or incorporate child life content as opposed to having no child life presence.

#### Area of Child Life Content

Area of child life content codes were included to capture a range of practice areas. Preparation and procedural support had the highest frequency of occurrence (64) followed by assessment (53) and professional collaboration (47) across all years. Twenty-six articles were coded as "other" and include topics such as school re-entry, neurological development, genetic testing, the history and scope of child life services, compassion fatigue or burnout, and multidisciplinary staff education interventions. Pain management (24), play (19), bereavement support (17), illness/treatment education (10), parent support (9), and sibling support (4) made up the remaining areas of child life content. Percentages are shown in Figure 5.

Due to play, preparation, procedural support, and professional collaboration being considered foundational areas of child life practice, the percentages of



Figure 4 Percentage of Articles by Level of Child Life Presence

100



Figure 5 Percentage of Areas of Child Life Content (1998-2017)

each are presented together in Figure 6 as a smooth function of year (LOESS curves).

As observed in Figure 6, the percentage of play content reached a high in 1998. However, play content decreased between 2010 and 2017 as the percentage of content related to preparation and procedural support began to increase. Similarly, the percentage of content reflecting professional collaboration has remained steady but with content specific to preparation and procedural support surpassing it starting around 2004. Content related to play has remained lower than professional collaboration content across all years.

To test whether the differences between preparation and procedural support and all other categories was significant, a multinomial logistic regression model was fit, identical to that described in the section titled "Child Life Presence," but with area of child life content category as the outcome and preparation and procedural support as the reference class. As shown in Table 4, the intercepts for the categories of "professional collaboration" and "assessment" indicate that "procedural support and preparation interventions" was significantly more likely across the time period than the other categories (except for professional collaboration and assessment, which were not significant). The significant and negative slope estimates for "play," "assessment," and "bereavement support" indicate that, over time, these categories became increasing less likely than procedural support and preparation interventions.

Table	4. Multinomial	Logistic	Regression	Model: Area	of
Child	Life Content				

Category	Inter- cept estimate	S.E.	p-value	Slope of time estimate	S.E.	p-value
Play	-1.151	0.278	<.001	-0.160	0.054	.003
Parent support	-2.006	0.417	<.001	0.020	0.094	.830
Sibling support	-2.670	0.523	<.001	-0.075	0.110	.495
Illness/ Treatment education	-1.753	0.348	<.001	-0.124	0.069	.073
Assessment	-0.199	0.207	.336	-0.195	0.042	.000
Pain management	-0.883	0.250	<.001	-0.132	0.051	.010
Professional collaboration	-0.215	0.204	.292	-0.063	0.045	.161
Other	-0.825	0.247	.001	-0.046	0.055	.399
Bereavement support	-1.258	0.289	<.001	-0.157	0.056	.005

#### Alpha .05

Over time, child life content relating to preparation and procedural support has come to be the dominant child life content area observed in publications. Al-



Figure 6 Percentages as a Smooth Function of Year: Play, Preparation/Procedure Support, and Professional Collaboration

though play and professional collaboration are foundational to child life practice, each is featured minimally in comparison to preparation and procedural support. In particular, the gap in articles presenting content on child life play in comparison to preparation and procedural support is at its widest in this final year of the study, 2017.

#### Authorship

The majority (183) of articles included in this study did not identify a child life specialist as an author. However, child life specialists were noted as the first author in 49 (17.9%) or contributing author in 37 (13.6%) of the sample articles.



Figure 7 Percentage of Child Life Authorship Type (1998-2017)

The descriptive results above show that child life specialists indeed were not typically included as authors (Figure 7). However, child life specialists were actually more likely to be lead authors than contributing authors of publications included in the sample. Figure 8 displays the percentage of articles by level of child life authorship as a smooth function of year (LOESS curves). Figure 8 shows that the percentage of articles with no child life author has remained steady across the 20-year period of observation relative to cases in which a child life specialist is listed as a contributing author or as a first author. However, the curve shows child life specialists as first authors has shifted relative to contributing authorship after 2008.

To test that the observed differences between categories and/or change over time was significant, a multinomial logistic regression model was fit with authorship category as the outcome and "No CL Author Reference" as the reference class. Results are shown in Table 5. The significant intercepts for all categories indicate that "No CL Author Reference" was significantly more likely than all the other categories. Slope for time is not significant for any category, indicating there was not a significant effect of time on child life authorship.

Table 5 Multinomial Logistic Regression Model: Authorship

Category	Intercept estimate	S.E.	p-value	Slope of time estimate	S.E.	p-value
1st author CLS	-1.334	0.163	<.001	0.033	0.033	.324
Contributing author(s)	-1.636	0.186	<.001	-0.054	0.033	.099
Acknowledge- ment	-3.826	0.507	<.001	-0.017	0.096	.855

Overall, within this sample, authors primarily came from backgrounds other than child life, such as medicine, nursing, or academia. Despite the passage of time, the prevalence of child life authorship has not increased significantly. In total, 91 unique Certified Child Life Specialist authors were identified in the



Figure 8 Percentages as a Smooth Function of Year: Child Life Authorship

present analysis. However, as described above, 21 of these CCLS contributors were observed to author publications on topics outside the scope of child life services and did not reference the profession outside of the author byline.

#### **Journal Discipline**

The percentage of articles by journal discipline identified in this sample is shown in Figure 9. Medical journals were most frequent with 39.19% (107) followed by Nursing at 24.17% (66), Child Health and Development at 8.05% (22), and Other at 13.6% (37). Examples of "Other" journal disciplines included psychology, music and art therapy, family sciences, and professional studies.



Figure 9 Percentage of Publication by Journal Discipline

When examined as a smooth function of year (LOESS curves), nursing journals were the predominant outlet for articles with "Reference to Child Life" from around 1998 to 2010, as shown in Figure 10. However, across most of the sampled time period, articles with "Reference to Child Life" were increasingly be-

ing published in medical journals, which became the predominant outlet from 2010 to 2017.

To test that the observed differences between categories and/or change over time was significant, we fit a multinomial logistic regression model with journal category as the outcome and "medicine" as the reference class. Results are shown in Table 6.

Table 6 Multinomial Logistic Regression Model

Category	Intercept estimate	S.E.	p-value	Slope of time estimate	S.E.	p-value
Nursing	-0.475	0.164	.004	-0.125	0.033	<.001
Child Health and Devel- opment	-1.565	0.243	<.001	-0.119	0.046	.009
Psychology	-2.091	0.304	<.001	-0.119	0.056	.033
Music Therapy	-3.165	0.519	<.001	-0.172	0.082	.037
Art Therapy	-3.295	0.538	<.001	-0.134	0.093	.148
Family Sciences	-2.506	0.373	<.001	-0.145	0.064	.024
Professional Studies	-2.435	0.373	<.001	0.036	0.083	.664
Other	-1.015	0.194	<.001	-0.046	0.041	.266
Alpha .05						

The negative and significant intercepts for all categories indicate that medicine was significantly more likely than all other categories. The significant and negative slope estimates for nursing, child health and development, psychology, music therapy, and family sciences indicate that, over time, these categories became increasing less likely than medicine.



Figure 10 Percentages as a Smooth Function of Year: Journal Discipline

# Discussion

These results highlight several key findings of importance not only to practicing Certified Child Life Specialists, but all involved in child life work — students, academics, administrators, managers, or interdisciplinary colleagues. First, child life presence in published research is increasing over time, from a total of three articles published in 1998 to 32 published in 2017 (with a mean of 13.62 articles per year). It is difficult to attribute this increase entirely to intra-professional initiatives or programs, as the emergence of digital publishing and open-access journal formats has greatly increased the total number of empirical articles published across disciplines, particularly in the past ten years (Pinfield et al., 2016). Although a causal link cannot be identified within the bounds of this study, these results suggest that the frequency of research related to child life specialists will continue to rise as publication outlets expand.

When child life presence in the total sample of 273 articles was evaluated more closely, additional patterns emerged. First, in most of the articles (75.8%; 207), the term "child life specialist" or "child life therapist" was only mentioned in the body of the paper, without further description of professional practice or research involvement. These brief mentions do enhance the visibility of Certified Child Life Specialists to audiences which may not have previous exposure. At the same time, much like in clinical care, the quality of these references can often speak volumes more than the quantities alone. Therefore, Certified Child Life Specialists should strive to advocate for the quality of their services not only in the clinical realm, but also in academic literature as well.

On the other hand, of the total sample, only six (2.2%) featured child life specialists or child life-led interventions as the subject of focus or study. Between 1998 and 2017, there was no significant increase in these types of articles, likely because of the small sample subset available. This observation is particularly concerning, as the sustainability of the child life profession is intricately intertwined with the dominant evidence-based practice philosophy of health care. Therefore, although child life presence is increasing, it is important to consider both the quality and quantity of these inclusions to ensure that the profession is accurately represented, easily recognized, and valued for its provision of evidence-based psychosocial care for children and families.

Another key finding is the changing trend in the types of child life content and interventions appearing in the published literature. As these results highlight, publications related to play have been decreasing over the past 20 years, despite play being a foundational tenet and skill of the child life profession (Williams et al., 2019). Although the vein of play runs strong through procedural preparation and support interventions, which appear to be significantly increasing in literature related to child life services, the fundamental role of play is seldom discussed in these procedure-focused articles. Instead, interventions are typically described as standardized educational sessions that may or may not include a more structured, adult-led application of medical play to achieve procedural coping goals.

One potential explanation for this changing trajectory of research focus may stem from the practicalities of research design. Play, as a primarily individualized and open-ended intervention, is exceedingly more difficult to define, measure, and evaluate in a controlled experimental condition. Results garnered from these studies are difficult to generalize across populations and clinical settings, reducing their perceived value in the medical community. Procedural interventions, when standardized into experimental protocols that can be manipulated by study staff, may be considered more objective, reliable, valid, and actionable by the same intended audience. Despite the child life community's recognition of the value of both kinds of knowledge and study, the evidence-based medicine movement ---at its core - emphasizes the power and "truth" yielded by experimental designs such as the randomized controlled trial (Dang & Dearholt, 2017).

In terms of authorship, it is important to recognize the lack of child life authors identified in publications between 1998 and 2017. More than 67% of the articles included in this study failed to list an author with a CCLS credential; slightly more than 1% featured a CCLS in the article acknowledgements rather than the byline. When child life specialists are listed as authors, there is a similar likelihood as to whether they will occupy a primary author or secondary author positions; 17.9% and 13.6% respectively. Furthermore, study results reveal that these percentages are not increasing over time.

One possible explanation for this phenomenon is the lack of research coursework requirements for Certified Child Life Specialists prior to 2019. Perhaps a perceived lack of knowledge and experience has served as a barrier to child life involvement in research design and dissemination. However, another possible explanation is the positioning of child life specialists as psychosocial practitioners in a medically dominant context. Certified Child Life Specialists could benefit from additional training and resources to assist them in advocating for their rightful place as contributors to research about their services.

Finally, a distinct finding of this scoping review concerns the journals in which articles about child life services are most likely to be located. When categorized by academic discipline, medical journals (39.2%) and nursing journals (24.2%) were most likely to house articles referencing Certified Child Life Specialists, followed by a smaller percentage featured in child health and development journals. And, as of 2010, the dominant prevalence of child life research in nursing publications shifted to a more medical audience, in journals such as *Pediatric Radiology; Rheumatology; Palliative Medicine*; and *Burns*.

There is both benefit and cost to this observed trend in this study. First and foremost, while frequent publication in nursing and medical journals may be due to multidisciplinary research collaborations, at the same time it serves to increase the recognizability of child life services for the audience most likely involved in health care administration and decision-making. On the other hand, these trends highlight the current status of child life as a professional field, rather than an academic discipline or field of study. With these mentions primarily situated in practice-oriented journals, it will be difficult to elevate child life practice as a distinct field of study that merits further inclusion in academic institutions and scholarly repositories. Moving forward, the child life profession should consider generating its own publication outlets to support the evolution of child life-related research and practice into a discrete field focused on the psychosocial needs of children and families in health care settings.

As the earliest review of its kind of emerging evidence of child life-related publications, this study is valuable for the identification of the types of evidence that address and inform child life work. Furthermore, scoping reviews have been described as "an ideal tool to determine the scope or coverage of a body of literature on a given topic and give clear indication of the volume of literature and studies available as well as an overview (broad or detailed) of its focus" (Munn et al., 2018, p.2). The analysis presented allows for the clarification of perceptions of the extant child life-related literature by offering statistical evidence of the progress and limitations of child life topics, focus, authorship, and academic disciplines of journals published between 1998 and 2017. Efforts to inform clinical practice, academic training, advocacy, and research arise from a range of initiatives. In this case, the scoping review may serve as a marker in time and offer direction for future research and publication activity.

### Conclusion

This scoping review revealed a consistent increase in research literature written by and about Certified Child Life Specialists over the past two decades, although at non-significant levels. Thus, there is more work to be done. By noting these trends in CCLS authorship and participation, as well as interventions and populations studied, child life professionals can appeal not only to their anecdotal experiences and clinical expertise, but also to the evidence when advocating for the needs of patients and families - echoing the spirit of the evidence-based medicine movement. In addition, this knowledge of the literature base illuminates the importance of capitalizing on interdisciplinary relationships and opportunities for scholarly collaboration to advance the child life field. Furthermore, these results demonstrate the importance of both academic and clinical education about evidence-based practice, scholarly inquiry, and research to ensure the longevity of the child life profession not just in the literature, but also for the psychosocial well-being of children and families.

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