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Authorship Decision-Making: A National Survey of Counselor Educators

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Abstract

Counselor educators are often expected to write for publication and, although encouraged, collaboration creates authorship dilemmas. Using survey methodology, the present study focused on examining authorship practices of counselor educators regarding conceptual and research manuscripts (N = 246) and conference presentations (N = 121). Participants reported their experiences in three areas: (a) doctoral training related to authorship, (b) participation as an author while a doctoral student, and (c) current authorship practices as a faculty member. Detailed outcomes, implications, and recommendations for future research and training are discussed.

Keywords

authorship; ethics; decision-making; counselor education

Counselor educators are often expected to write for publication and in this process, they may collaborate with others. Although the counseling profession encourages collaboration, it creates dilemmas in deciding who to include as authors and the order of authors. Collaborative research and scholarly writing are long-term ventures during which disagreement, confusion, and conflict can arise (Borders et al., 2012). Power differentials and dual relationships among collaborators can increase the complexity of authorship determination. Therefore, it is crucial to expand the knowledge in the counseling profession about authorship decision making.

Guidelines for Authorship Decision-Making

Counselor educators may seek guidance in the authorship decision-making process through a review of guidelines and standards provided in various professional resources. This may include the American Counseling Association (ACA, 2014) *Code of Ethics*, the American Educational Research Association (AERA, 2011) *Code of Ethics*, the Association for Counselor Education and Supervision (ACES; Borders et al., 2012) *Research Mentorship Guidelines*, the American Psychological Association (APA, 2010) *Publication Manual*, and the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2015) *2016 Standards*. Thus, counselor educators may obtain information from multiple professional sources.

The ACA (2014) and AERA (2011) codes and the APA (2010) manual indicate that individuals who contribute significantly should receive authorship credit and that the order of authorship should be based on contribution. Additionally, the ethical codes and the APA manual state that authorship should be determined as early as possible in the project, with collaborators deciding on project tasks, division of work, and receiving credit (APA, 2010). However, authors may need to reassess authorship credit and order throughout the project if there are changes in

contribution (APA, 2010). APA specifies that a substantial contribution includes writing a major portion of the manuscript, formulating a hypothesis, structuring the study, conducting analyses, and interpreting results. Supportive functions such as collecting or entering data, advising about analyses, and recruiting participants may not constitute authorship, but may be acknowledged in a note (APA, 2010). Scholars should not receive authorship credit when they do not contribute.

The ACES *Guidelines for Research Mentorship* (Borders et al., 2012) address ethical research practices for students, which is also addressed in the ethical codes and the APA (2010) manual. In creating the guidelines, scholars aimed to enhance mentoring relationships, as well as mentees' research quality and productivity. The guidelines provide characteristics and roles of mentors including ethical research behavior, researcher knowledge and skills, and personal characteristics that enhance mentoring (Borders et al., 2012). Ethical behavior includes addressing power differentials, potential conflicts of interest, and cultural differences. The guidelines specify that an ethical research mentor respects appropriate authorship and acknowledgement of the research project and idea, including manuscripts or presentations based on students' course papers, projects, dissertations, and theses. The mentor's primary responsibility is to provide support and assistance, unless otherwise desired by the mentee. The mentee discusses potential project outcomes and what ownership may entail. Further, the mentee is responsible for providing accurate and appropriate authorship or acknowledgement. The mentor and mentee also discuss expectations, responsibilities, strengths, and limitations of both the student and faculty and what their relationship will entail during the project. Status, such as faculty rank or student training level, should not determine the order of authorship, and in most cases, students should be the first author on manuscripts based on their projects, such as their dissertation (APA, 2010).

In referring to accreditation standards, the *2016 CACREP Standards* (CACREP, 2015) specify that doctoral programs in counselor education are intended to extend the knowledge base of the counseling profession by supporting faculty and students in publishing and presenting the results of scholarly work. Doctoral students are required to complete internships that must include supervised experiences in at least three of the five doctoral core areas. Research and scholarship is one of the five domains. Thus, there is a need for training on ethical authorship practices within doctoral training programs.

The authorship determination process is further complicated by engagement in interdisciplinary collaboration, as authorship guidelines may differ by discipline and within various publications. Regarding authorship guidelines in bioethics research, Resnik and Master (2011) emphasized the importance of fairness and accountability. Additionally, in considering authorship standards for the physical sciences, Borenstein (2011) reported that although guidelines exist (e.g., American Chemical Society, 2010), there is a lack of standardization among publications. Specifically, within engineering publications, one cannot assume that the first author has the highest level of contribution, as some publications list authors in alphabetical order. Borenstein also reported that order of authors is further complicated among interdisciplinary teams in determining level and significance of each researcher's contribution, when researchers may not fully understand their collaborators' areas of expertise. Nevertheless, Osborne and Holland (2009) reviewed guidelines for determining authorship across disciplines including medicine, physical sciences, and social sciences and found that best practices across disciplines suggest discussing authorship openly and often, especially when power differentials exist. They also acknowledged that it is difficult for guidelines to be more specific or objective because each project, research team, and discipline is different in subtle ways. However, scholars

can begin authorship discussions by reviewing and discussing professional guidelines, as well as considering recommendations presented within authorship decision-making models.

Decision-Making Models

To assist with making authorship decisions, scholars have developed decision-making models and considerations. Winston (1985) developed a schema for identifying and analyzing activities that contribute to the development of a manuscript by using a weighted point system. Using this method, scholars identify and assign points to 11 activities or processes involved in the planning, conducting, and reporting of data-based research. Then, the researcher assigns weights to points in each category based on the author's judgment of the value each category brings to the success of the project, often based on time, expertise, and quality of contribution (Winston, 1985). Scholars earn authorship credit based on the points earned, with the individual with the highest point value receiving first authorship. The weighing schema is beneficial in examining the contributions of all researchers. However, in projects involving faculty and student collaboration, the level of scholarly competence may affect the points earned by an individual. Furthermore, scholarly tasks may differ across projects and warrant modification in weighing of points. Thus, despite the value and utility of this model, dilemmas arise when using the model for collaborations that involve power differentials (i.e., faculty and student collaborations).

Through consideration of different perspectives and power differentials, Foster and Ray (2012) developed a decision-making model with the goal to help prevent and resolve ethical dilemmas related to authorship credit, including faculty and student collaborations. They presented a four-phase model with the aim to ensure ethical decision-making by addressing roles and responsibilities during the development of the project idea, assignment of research tasks,

writing responsibilities, and editing of the manuscript. At the conclusion of each phase, they recommended that authors have a discussion about authorship credit based on the level of contribution. They also recommended (a) an early discussion of authorship issues, (b) communication of expectations, (c) faculty taking responsibility to initiate conversations about inherent power differentials, and (d) revisiting authorship order during stages of the project.

Finally, in considering authorship decisions specifically related to conceptual articles, Resnik and Master (2011) identified five areas of authorship involvement and reported that authors should be required to participate in at least two of these areas. The areas included (a) proposing the idea for the article, (b) examining the literature, (c) developing arguments to support the idea, (d) addressing counterarguments, and (e) writing. They emphasized the importance of guidelines in this area because despite the established guidelines for authorship on empirical articles, guidelines for conceptual articles are lacking.

Existing Practices

A few researchers have sought to examine authorship practices. Sandler and Russell (2005) examined unethical and unfair authorship assignments occurring in psychology-based faculty-student collaborations and found that 27% of participants believed they had been involved in an unethical or unfair authorship assignment. Yet, only 4% of these individuals acknowledged they had reported the incident to an authority figure. Thus, Sandler and Russell concluded that most perceived unethical authorship assignment incidents are unreported and ignored. Additionally, Geelhoed et al. (2007) examined authorship credit decision-making processes and found while most authors indicated they are satisfied (84%) with the process, they also reported cases of both undeserved authorship (18%) and omission of deserving coauthors (9%). Apgar and Congress (2005) also examined authorship decision-making, specifically for

social work educators, and found most believe authorship should be decided primarily by writing contribution, rather than originator of the idea or seniority. Furthermore, in exploring authorship decision-making practices among faculty in the biosciences, Kassis (2017) found agreement that time spent conducting experiments, developing hypothesis, analyzing data, and writing the manuscript were the four most important criteria for both determining authorship status and order.

In regard to student-faculty collaborations, Welfare and Sackett (2010) examined perceptions of current and recommended authorship practices, and found a lack of consensus about best practices. Participants also reported current practices were not aligned with ethical guidelines. Additionally, the results indicated a high likelihood of disagreement about appropriate recognition for student collaborators, which may lead to real or perceived injustices in recognition. Furthermore, the authors found both students and faculty recognized the following contributions as most important in determining authorship: (a) having the initial idea, (b) planning the project, (c) writing, and (d) the amount of expertise required for the tasks.

Expanding upon their initial study, Welfare and Sackett (2011) further examined current and best practices for authorship determination in student-faculty collaborations. The authors reported there was a variety of authorship determination practices, despite recognition of the discrepancies in practice and revision of ethical guidelines (Welfare & Sackett, 2011). The results indicated it is common practice to have a discussion, initiated by faculty, to determine authorship in student-faculty collaborations and faculty decide the authorship order. However, scholars recommend revisiting this process to have shared decision-making that also involves reevaluating authorship throughout the process. Welfare, Sackett and Moorfield-Lang (2011) also qualitatively explored student and faculty experiences with the authorship determination

process and identified five common themes: (a) varied nature of collaborations, (b) communication, (c) expectations, (d) inclusion, and (e) legacy. The authors emphasized being transparent about the rationale for decisions, using available resources to increase trust, and creating positive mentoring experiences for student collaborators (Welfare et al., 2011).

Professional associations have outlined guidelines and scholars have proposed decision-making models; however, authorship determination remains challenging. We found limited research focused on examining authorship practices, with no studies found that focused exclusively on counselor educators. Thus, this study focuses on practices of counselor educators. We examined the following three research questions: (1) What were counselor educators' taught about authorship and presentation practices? (2) What were counselor educators' author and presenter experiences during their doctoral programs? (3) What are the current authorship and presentation practices of counselor educators? (4) What is the relationship between author and presenter practices and participant demographics?

Method

Participants

The targeted population for this study was counselor educators who were employed at programs accredited by CACREP. A total of 2,165 faculty were invited to participate in the study. Of those emailed, 33 were undeliverable and 20 were ineligible to participate (not counseling faculty). There were 307 faculty who participated in the study; however, 61 had incomplete responses; and therefore, these cases were excluded in the final analysis, resulting in a response rate of 12%. A total of 246 participants responded to items about authorship practices related to scholarly writing and 121 of these participants also responded to items about conference presentations. Table 1 provides a detailed description of the participants.

Table 1: Participant Demographics

Age	29-39 78 (32%)	40-49 59 (24%)	50-59 48 (20%)	60-79 39 (16%)	No report 22 (9%)			
Gender	Males 78 (32%)	Females 147 (60%)	Other 5 (2%)	No report 16 (7%)				
Race/ Ethnicity	White 183 (74%)	Hispanic 17 (7%)	Black 13 (5%)	Asian 5 (2%)	Other 15 (5%)	No report 15 (6%)		
Rank	Assistant 102 (42%)	Associate 52 (21%)	Professor 60 (24%)	Other 13 (5%)	No report 19 (8%)			
Yrs in Academia	5 or less 76 (31%)	5.1-10 47 (19%)	10.1-15 33 (13%)	15.1-20 23 (9%)	20.1-25 17 (7%)	Over 25 33 (13%)	No report 17 (7%)	
Carnegie Group	R1 52 (21%)	R2 58 (24%)	R3 37 (15%)	M1 32 (13%)	M2 31 (13%)	M3 19 (8%)	Other 1 (0.4%)	No report 16 (7%)
Yr of Doc Grad	2011-16 85 (35%)	2006-10 40 (16%)	2000-05 30 (12%)	1990-99 34 (14%)	1970-89 21 (9%)	No report 36 (15%)		
Carnegie Group of Doc Prog	R1 122 (50%)	R2 62 (25%)	R3 32 (13%)	M1 4 (2%)	M2 1 (0.4%)	Other 1 (0.4%)	No report 24 (10%)	
	None	**1-5**	**6-10**	**11-20**	**Over 20**	**No report**		
Publish Conceptual	9% (23)	42% (104)	18% (45)	8% (19)	11% (26)	12% (29)		
Publish Research	5% (13)	40% (98)	15% (36)	15% (36)	14% (34)	12% (29)		
Present	1-10 13% (32)	11-20 15% (38)	21-50 28% (69)	51-100 20% (48)	Over 100 11% (26)	No report 13% (33)		
	None	**1-5**	**6-10**	**Over 10**	**No report**			
Conceptual with stud.	0 (0%)	38% (94)	5% (13)	6% (14)	15% (38)			
Research with stud.	36% (88)	29% (72)	7% (17)	12% (29)	16% (40)			
Present with stud.	None 12% (30)	1-10 46% (114)	11-20 8% (19)	21-50 11% (27)	Over 50 6% (15)	No report 17% (41)		
	None	**1-5**	**Over 5**	**No report**				
Conceptual as a stud.	49% (121)	34% (83)	0.8% (2)	16% (40)				
Research as a stud.	37% (90)	44% (108)	5% (12)	15% (36)				
Present as a stud.	24% (58)	40% (99)	20% (49)	16% (40)				

In setting the context for discussing authorship, participants reported their history publishing articles and presenting at conferences (see Table 1). Regarding published conceptual articles, the most frequently reported response was 1-5 articles, which was reported by 104 (42%) participants. For research articles, the most commonly reported response was also 1-5 articles, as reported by 98 (40%) participants. Additionally, regarding presentations, the most frequently reported response was 21-50 presentations, as reported by 69 (28%) participants.

Participants also discussed articles and presentations with students. For conceptual articles with students, the most frequently reported response was 1-5 articles, as reported by 94 (38%) participants. For research publications with students, the most commonly reported response was no publications, as reported by 88 (36%) participants. For presentations with students, the most frequently reported response was 1-10 presentations, as indicated by 114 (46%) participants.

Finally, the counselor educators reported published articles and presentations as a student. Regarding conceptual articles, the most frequently reported response was no articles, as identified by 121 (49%) participants. Additionally, the most common response for research publications was 1-5 articles, as reported by 108 (44%) participants. Regarding presentations, the most frequently reported response was 1-5 presentations, as reported by 99 (40%) participants.

Instrumentation

We designed the instrument based on a review of the literature on authorship. To strengthen the face and content validity, we had six experts with expertise in instrument development, authorship practices, and ethics review the instrument and provide feedback about the items and the format of the survey. Then, we revised the instrument based on the feedback. The instrument encompassed three sections focused on (a) authorship on conceptual and research

articles, (b) authorship on conference presentations, and (c) demographic information (i.e., gender, age, professional status, Carnegie institution classification [defined at: http://carnegieclassifications.iu.edu/definitions.php], number of publications). Additionally, the two sections on authorship included three subsections each: (a) what participants were taught about authorship, (b) experiences with authorship as doctoral students, and (c) current practices. We used a Likert scale format for response options. The survey contained a total of 108 items, with 16 items focused on gathering demographic information. Due to the length of the survey, the items focused on conference presentation authorship were optional. The list of items, excluding the demographic questions, are included in the appendices.

Procedure

Following approval from the institutional review board at our university, we developed a list of faculty at masters and doctoral level CACREP-accredited counseling programs. We emailed and invited all faculty, listed on program websites, to participate in the study. The recruitment email included a link to the Qualtrics survey. As reported above, the authors made the section of the survey related to conference presentation authorship optional to encourage participation. In obtaining data, we followed guidelines for conducting survey research outlined by Dillman, Smyth, and Christian (2009).

Data Analysis

Before analyzing the data, we accounted for missing data. Then, we analyzed the data by calculating descriptive statistics for each of the items to answer Research Question 1 (see Appendix A), 2 (see Appendix B), and 3 (see Appendix C). Finally, to examine Research Question 4, we examined the relationship between items with a more even response distribution

(as reported in the appendices) and the demographic variables using Spearman Rho's correlations.

Results

Prevalence of Article Authorship and Conference Presenters

The researchers present the results of examining Research Question 1 (what counselor educators were taught about who to include as an author and presenter) in Appendix A. The responses were skewed towards either strongly agree/agree or strongly disagree/disagree for all items, except for two where responses were evenly spread (within 5%) between these response categories (see Table 2). For these items, we further examined the data to answer Research Question 4 by calculating correlations between the items and the following demographic data (age, rank, years in higher education, conceptual articles, research articles, conceptual articles with students, and research articles with students). The first item (everyone involved in the project, including those who help conduct the study and those who write part of the article, should be invited for authorship) was positively correlated with age (r_s = .14, p < .05). The second item (only those writing part of the article should be invited for authorship) was not correlated with any of these demographic variables.

Table 2: What Participants Were Taught About Who to Include as an Author

Items	SD	D	MF	A	SA
Everyone involved is an author	11% (27)	26% (63)	23% (57)	29% (70)	11% (28)
Only those who write are authors	11% (26)	27% (67)	19% (47)	34% (83)	9% (22)

Note: Response options: SD=Strongly Disagree, D=Disagree, MF=Mixed Feelings, A=Agree, SA=Strongly Agree Items about article authorship (N = 246).

The researchers present the results of examining Research Question 2 (author and presenter experiences as a doctoral student) in Appendix B. Responses were skewed towards

either never/seldom or frequently/always for all items, except for three where responses were evenly spread (within 5%) between these response categories (see Table 3). For these items, we further examined the data to answer Research Question 4 by calculating correlations between the items and the same demographic data used for Table 2 calculations, except we examined conceptual articles, research articles, conceptual articles with students, and research articles with students for items related to article authorship; and presentations and presentations with students for items related to presentations. The first item (invited as an author by other students when I contributed to the writing) was negatively correlated with age (r_s = -.26, p < .01) rank (r_s = -.21, p < .01), and years in higher education (r_s = -.22, p < .01). The second (included as a presenter on presentations where I received compensation for my help on the project due to work on an assistantship or fellowship) and third (dissertation chair was not included on presentations from my dissertation) items were not correlated with any of these variables.

Finally, the researchers present the results of examining Research Question 3 (current author and presenter practices) in Appendix C. Responses were skewed towards either never/seldom or frequently/always for all items, except for three (see Table 3). For these items, we further examined the data to answer Research Question 4 by following the same procedures used for Table 2 calculations. The first item (students are included as authors on articles I write, in which they help conduct the study, but do not write) was positively correlated with years in higher education (r_s = .16, p < .05), conceptual articles (r_s = .15, p < .01), research articles (r_s = .24, p < .01), conceptual articles with students (r_s = .26, p < .01), and research articles with students (r_s = .26, p < .01). The second item (colleagues are included as authors on articles I write, in which they help conduct the study, but do not write) was positively correlated with conceptual articles (r_s = .19, p < .01), research articles (r_s = .20, p < .01), and research articles

with students (r_s = .17, p < .05). The third item (students are first author on my projects when they do most of the work) was positively correlated with age (r_s = .14, p < .05), years in higher education (r_s = .18, p < .01), rank (r_s = .19, p < .01), conceptual articles (r_s = .29, p < .01), research articles (r_s = .33, p < .01), conceptual articles with students (r_s = .41, p < .01), and research articles with students (r_s = .42, p < .01).

Table 3: Author and Presenter Experiences during Doctoral Training and Current Practices

Items	1	2	3	4	5	6
Author and Presenter Experiences during Doctoral Training						
Invited as author by other students when contributed to writing	35% (86)	13% (33)	11% (27)	20% (48)	12% (29)	9% (23)
Presenter when paid as assistantship	44% (53)	14% (17)	5% (6)	16% (19)	10% (12)	7% (9)
Dissertation chair was not included on presentations from my dissertation	22% (27)	28% (34)	7% (8)	6% (7)	7% (8)	27% (33)
Current Author Practices						
Include students when they help conduct study, but do not write	25% (61)	13% (33)	14% (35)	21% (51)	13% (33)	13% (31)
Include peers when they help conduct study, but do not write	26% (63)	13% (32)	12% (30)	23% (57)	11% (28)	14% (35)
Students are first author on my projects, when they do most of work	45% (111)	8% (20)	10% (24)	16% (40)	11% (28)	8% (20)

Note: Response options: 1=No Experience, 2=Never, 3=Seldom, 4=Sometimes, 5=Frequently, 6=Always. Items about article authorship (N = 246). Items about presentations (N = 121).

Discussion

Counselor educators were in agreement about their experiences with training, experiences as a doctoral student, and their current practices regarding article authorship and conference presenters in most areas. However, counselor educators also reported a middle response (mixed feelings/sometimes) for several items. Consistent with Apgar and Congress' (2005) findings, the

APA Publication Manual, and the ACA and AERA Code of Ethics, counselor educators reported that the contribution amount should determine the order of authorship. Also, consistent with previous research (Apgar & Congress, 2005), writing contribution, instead of originator of the idea, should determine authorship order. However, in this study, counselor educators also reported that contribution alone, regardless of the role, should not determine authorship.

In this study, participants did not reach agreement on teaching and current practices related to being inclusive or to only include individuals who write. Training regarding inclusivity was positively correlated with age, while current experience was correlated with other demographic variables including publications. Thus, although older educators perceived their training as focusing on inclusivity, experience with publishing influenced inclusivity practices, which may relate to less pressure to be the sole author among experienced faculty, and a desire to mentor students and younger faculty. A lack of consensus about inclusivity, related to faculty-student collaborations, was found by Welfare and Sackett (2010). In considering inclusivity further, the APA (2010) Manual states that individuals that make substantial contributions should be authors, while those making minimal contributions may be acknowledged. The findings also revealed that educators with a higher rank, and more experience in the field and with publishing were more likely to allow students to take the lead and be first author on faculty projects. This may relate to lessened pressure to be first author for senior level faculty, which was also supported by the themes identified by Swank, Houseknecht, and Puig (in press).

In considering practices of inclusivity, Oberlander and Spencer (2006) discussed the concepts of honorary and ghost authorship. Regarding honorary authorship, they emphasized that although senior level faculty may be willing to include graduate students as authors to help advance their careers, this is unethical behavior when they have not made a significant

contribution to the project, and it can minimize the credit of authors that have made a substantial contribution. This may also occur when senior level faculty are added to publications without making a significant contribution. In contrast, Oberlander and Spencer (2006) also reported concern with not including authors that have contributed substantially to the project (ghost authorship), which denies individuals credit for their work. Thus, in practicing inclusivity, authors want to ensure that their decisions about who to include as authors are ethical.

We also found a lack of agreement about experiences writing as a student with other students and experiences presenting. The findings revealed that educators that are younger, have a lower rank, and have fewer years in the field were more likely to be included as an author by other students when they contributed to the writing. This finding suggests a recent trend to include fellow students on publications during doctoral training. However, the literature is limited regarding student collaborations. Additionally, we found no literature on presenter standards. However, in comparing responses regarding article authorship with presentations, some differences emerged. Specifically, in regard to inclusivity, respondents reported greater consensus about inviting everyone to be presenters that was involved in the project.

Implications

In the process of developing articles and presentations, authorship discussions are crucial. However, current and best practices do not always align (Welfare & Sackett, 2010). Therefore, it is essential to include discussions about authorship in counselor training, as well as within workshops for existing counselor educators and counselors to ensure that ethical standards and best practices are used in the authorship decision-making process. This training may align with various doctoral seminars and can also be integrated within masters programs (i.e., inclusion within the ethics and research courses). Additionally, trainings and discussions about authorship

may be situated within conferences through workshops and panel and roundtable discussions. Furthermore, counselor educators may help doctoral students develop ethical authorship practices through modeling these practices during collaborative projects. It is crucial to teach and foster ethical authorship practices among graduate students because what they learn as students will likely influence their authorship practices as professionals (Oberlander & Spencer, 2006).

In addition to training, it is important that authors have a clear understanding of what constitutes a "substantial contribution" deserving authorship. This requires discussions among research and writing teams at the beginning and throughout the duration of the project (Oberlander & Spencer, 2006). This is especially important when power differentials are present, including senior and junior faculty working together and faculty student collaborations. These discussions are also necessary when deciding the level of contribution in interdisciplinary collaborations, when researchers may not fully understand their collaborators' areas of expertise and how they are contributing to the project, and when professions or publications may have different standards for the authorship decision-making process (Borenstein, 2011). Scholars also emphasize the importance of documenting the content of these discussions, including the roles of the contributors in a behavioral contract that is developed at the beginning of the process and revisited throughout the duration of the project (Swank et al., in press; Hopko, Hopko, & Morris, 1999; Oberlander & Spencer, 2004).

Limitations and Recommendations for Future Research

There are study limitations that researchers may address in future research. Although not all programs are CACREP accredited, we only recruited participants from these programs. Thus, future research may focus on authorship and presentation practices of counselor educators from non-accredited programs. Additionally, although we had a large sample size, we had a small

response rate. Moreover, not all of the participants responded to the items about presentations, resulting in less data related to this area of research. Although this was the first study found related to ethical considerations regarding presenters, future research may address this area in further detail. We also examined only the training and practices of counselor educators and future research may compare this to the training and practices of educators from other helping professions. Researchers may examine if a difference exists for educators who are trained and work in APA accredited programs. This study also focused on the perspectives of counselor educators and future research may compare them to doctoral students, especially for presentations since this is the only known study that has examined this aspect of authorship.

Conclusion

This study examined counselor educators' publication and presentation authorship practices. Results indicated that counselor educators agree on many authorship practices; while there is also disagreement regarding some practices (i.e., inclusivity). These findings suggest that doctoral program curricula, as well as faculty mentoring that address these topics, remain a necessity to help new and emerging counseling professionals navigate this aspect of professional development.

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Appendix A

What Participants Were Taught About Authorship and Presentation Practices

	SD	D	MF	A	SA
Everyone involved is an author	11% (27)	26% (63)	23% (57)	29% (70)	11% (28)
Everyone is a presenter	2% (2)	12% (15)	22% (27)	43% (52)	20% (24)
Only those who write are authors	11% (26)	27% (67)	19% (47)	34% (83)	9% (22)
Paid students are not always authors	18% (43)	30% (73)	28% (68)	20% (48)	5% (12)
Paid students not always presenters	15% (18)	35% (42)	21% (25)	21% (25)	8% (10)
Invite uninvolved peers needing a publication	49% (120)	27% (66)	19% (46)	5% (11)	1% (2)
Invite uninvolved peers needing a presentation	30% (36)	34% (41)	26% (31)	7% (9)	3% (3)
Invite uninvolved students needing a publication	54% (132)	34% (84)	10% (24)	2% (4)	<1% (1)
Invite uninvolved students needing a presentation	26% (32)	41% (49)	19% (23)	9% (11)	4% (5)
Faculty should be invited on students' publications they supervise	7% (16)	9% (23)	31% (77)	39% (97)	13% (32)
Faculty should be invited on students' presentations on supervised projects	4% (5)	17% (21)	30% (36)	36% (43)	12% (15)
Dissertation chair is author on dissertation publications	7% (18)	9% (21)	18% (44)	37% (91)	29% (71)
Dissertation chair is presenter on student's dissertation presentations	56% (7)	19% (23)	23% (28)	33% (40)	18% (22)
Dissertation committee members are authors on dissertation publications	30% (74)	37% (90)	18% (44)	10% (25)	5% (11)
Committee members are presenters on student's dissertation presentations	25% (30)	41% (49)	22% (26)	9% (11)	3% (4)
Decide authors before starting project	2% (4)	9% (23)	17% (41)	35% (85)	38% (93)

Discuss authorship if roles change	1% (2)	2% (4)	1% (2)	40% (99)	56% (138)
Determine authorship order on conceptual articles by writing amount	1% (3)	11% (28)	21% (52)	47% (116)	19% (47)
Determine authors for research articles by writing amount, regardless of roles in conducting study	7% (17)	37% (92)	32% (79)	18% (44)	6% (14)
Students add students to increase number of presentation or add those who don't have presentations	41% (50)	32% (39)	17% (20)	7% (9)	1% (1)
Presenter order is decided by lead	2% (2)	4% (5)	14% (17)	47% (57)	32% (39)
Presenter order decided by proposal contribution		3% (3)	16% (19)	50% (60)	31% (38)
Person with the idea is the first author	13% (31)	41% (100)	31% (75)	13% (32)	3% (8)
Person with the idea is first presenter	6% (7)	41% (50)	31% (38)	17% (20)	4% (5)
First author does most of the writing	3% (7)	14% (34)	30% (73)	41% (100)	13% (31)
First presenter does most of work	1% (1)	4% (5)	18% (22)	47% (57)	28% (34)
Student is first author on her project	1% (3)	9% (22)	23% (57)	43% (105)	24% (59)
Student is first presenter on her project	3% (3)	3% (4)	15% (18)	43% (52)	35% (42)
On student project, faculty is first author if they do the most work/ student stops working	1% (2)	4% (10)	24% (59)	50% (122)	21% (52)
On student project, faculty is first presenter if they do the most work/ student stops working	1% (1)	8% (10)	31% (37)	36% (44)	23% (28)

Note: Response options: SD=Strongly Disagree, D=Disagree, MF=Mixed Feelings, A=Agree, SA=Strongly Agree Items about article authorship (N = 246). Items about presentations (N = 121).

Appendix B

Participants' Author and Presenter Experiences during Their Doctoral Training

	1	2	3	4	5	6
Invited as author by faculty when contributed to writing	25% (61)	13% (32)	9% (22)	24% (58)	13% (33)	16% (40)
Invited as presenter by faculty when contributed to the idea	21% (25)	8% (10)	9% (11)	15% (18)	24% (29)	21% (25)
Invited as author by other students when contributed to writing	35% (86)	13% (33)	11% (27)	20% (48)	12% (29)	9% (23)
Invited as presenter by other students when contributed to the idea	20% (24)	8% (10)	9% (11)	19% (23)	22% (26)	20% (24)
Invited as author by faculty when I did preliminary work, but did not write	31% (76)	38% (93)	14% (34)	13% (32)	3% (7)	1% (3)
Invited as author by students, when I did preliminary work, but didn't write	42% (102)	40% (98)	9% (21)	7% (16)	2% (6)	<1% (1)
Included on faculty articles when I helped conduct study, but didn't write	33% (81)	35% (86)	11% (27)	11% (26)	6% (15)	3% (8)
Included on faculty presentations when I contributed to research project	30% (36)	9% (11)	7% (8)	21% (25)	17% (21)	14% (17)
Included on students' articles, when I helped conduct study, but didn't write	47% (115)	34% (83)	9% (21)	7% (16)	2% (4)	2% (4)
Included on students' presentations when I contributed to research project	30% (36)	8% (10)	7% (8)	20% (24)	19% (23)	14% (17)
Invited on faculty articles when I was on research team	32% (79)	22% (55)	9% (23)	17% (41)	11% (28)	7% (17)
Included on presentations when I was on the research team	31% (38)	12% (14)	4% (5)	26% (31)	14% (17)	11% (13)
First author for my idea and wrote with faculty	27% (67)	14% (34))	6% (15)	13% (32)	13% (31)	26% (64)
First presenter for conceptualizing the idea and presenting with faculty	25% (30)	7% (9)	6% (7)	11% (13)	21% (25)	26% (32)
First author on faculty project	37%	48%	7%	5%	1% (2)	<1% (1)

	(91)	(118)	(18)	(13)		
First presenter on faculty project	27% (33)	36% (44)	12% (14)	16% (19)	2% (2)	3% (3)
First author when I led the research project, but faculty did most writing	51% (125)	35% (85)	8% (19)	5% (12)	1% (3)	0% (0)
First presenter when led research	35% (42)	8% (10)	4% (5)	16% (19)	12% (15)	21% (25)
Author when paid as assistantship	45% (111)	27% (67)	6% (15)	8% (20)	8% (20)	3% (8)
Presenter when paid as assistantship	44% (53)	14% (17)	5% (6)	16% (19)	10% (12)	7% (9)
Dissertation chair was second author on articles from my dissertation	22% (55)	22% (53)	2% (4)	7% (17)	11% (27)	35% (87)
Dissertation chair was second on presentations from my dissertation	30% (36)	31% (38)	2% (2)	7% (8)	12% (15)	14% (17)
Dissertation chair was the first author on articles from my dissertation	24% (58)	73% (179)	1% (3)	1% (2)	0% (0)	1% (2)
Dissertation chair was first on presentations from my dissertation	26% (32)	64% (77)	3% (4)	3% (3)	0% (0)	1% (1)
Dissertation chair was not included on articles from my dissertation	25% (62)	49% (121)	2% (6)	5% (12)	2% (6)	15% (36)
Dissertation chair was not included on presentations from my dissertation	22% (27)	28% (34)	7% (8)	6% (7)	7% (8)	27% (33)
Committee members included on articles from my dissertation	22% (55)	52% (126)	5% (12)	7% (16)	5% (12)	9% (22)
Committee members included on presentations from my dissertation	23% (28)	53% (64)	7% (8)	6% (7)	7% (8)	1% (1)
Added students to presentations or I was added when didn't contribute	22% (26)	55% (67)	3% (4)	12% (15)	3% (3)	2% (2)

Note: Response options: 1=No Experience, 2=Never, 3=Seldom, 4=Sometimes, 5=Frequently, 6=Always. Items about article authorship (N = 246). Items about presentations (N = 121).

Appendix C

Current Author and Presenter Practices

	1	2	3	4	5	6
Include students on articles I primarily write, but they contribute to writing	18% (45)	<1% (1)	2% (6)	12% (29)	27% (67)	39% (97)
Include peers on articles I primarily write, but they contribute to writing	6% (14)	<1% (1)	3% (7)	10% (25)	31% (76)	50% (122)
Include students on my articles they do preliminary work, but don't write	18% (45)	26% (65)	20% (49)	20% (50)	9% (21)	6% (15)
Invite students as presenters when they contribute to the idea	12% (14)	0% (0)	3% (4)	22% (26)	23% (28)	36% (44)
Include colleagues on my articles they do preliminary work, but don't write	22% (54)	30% (73)	18% (43)	15% (37)	11% (26)	5% (12)
Invite colleagues as presenters when they contribute to the idea	6% (7)	1% (1)	3% (4)	15% (18)	26% (31)	45% (54)
Include students when they help conduct study, but do not write	25% (61)	13% (33)	14% (35)	21% (51)	13% (33)	13% (31)
Invite students as presenters when they contribute to the research project	6% (7)	1% (1)	3% (4)	15% (18)	26% (31)	45% (54)
Include peers when they help conduct study, but do not write	26% (63)	13% (32)	12% (30)	23% (57)	11% (28)	14% (35)
Invite colleagues as presenters when they contribute to the research project	10% (12)	2% (2)	3% (3)	13% (16)	27% (33)	41% (50)
Include students as authors on research team, regardless of their role	33% (81)	20% (48)	12% (30)	18% (45)	8% (19)	8% (19)
Invite students as presenters when they are members of the research team	18% (22)	3% (4)	2% (2)	21% (25)	26% (32)	26% (31)
Students are first author on articles they conceptualize and write with me	27% (66)	1% (2)	1% (3)	13% (32)	22% (54)	35% (87)
Student is first presenter for conceptualizing idea, presents with me	19% (23)	1% (1)	1% (1)	20% (24)	16% (19)	41% (49)

Students are first author on my projects, when they do most of work	45% (111)	8% (20)	10% (24)	16% (40)	11% (28)	8% (20)
Student is first when I do the most, so they can publish as first author	39% (96)	48% (117)	7% (16)	5% (12)	<1% (1)	0% (0)
Students are first on my research, for them to publish as a first author	42% (104)	44% (109)	5% (13)	6% (15)	<1% (1)	0% (0)
Students are first presenter on presentations about my projects	26% (32)	21% (25)	12% (15)	27% (33)	5% (6)	5% (6)
Students are first author when they lead research, but I do most writing	51% (126)	20% (49)	9% (22)	12% (30)	5% (13)	1% (3)
Students are first presenter when they lead research project	28% (34)	0% (0)	1% (1)	17% (20)	17% (21)	34% (41)
Students are included as authors when paid for their work	39% (96)	6% (14)	9% (21)	22% (53)	13% (33)	11% (26)
Students are included as presenters when paid for their work	37% (45)	2% (2)	4% (5)	22% (26)	17% (21)	15% (18)
I expect authorship when I assist a student with conceptualizing, conducting study, writing, editing	15% (36)	7% (17)	6% (14)	22% (53)	26% (65)	24% (58)
I expect authorship when I assist a peer with conceptualizing, conducting study, writing, editing	7% (16)	4% (10)	2% (6)	18% (45)	30% (73)	38% (93)
As chair, I expect to be second author on dissertation articles	36% (88)	12% (30)	2% (5)	16% (39)	14% (34)	19% (47)
As chair, I expect to be included on presentations about their dissertation	34% (41)	17% (21)	9% (11)	18% (22)	9% (11)	9% (11)
As chair, I expect students to be first author on dissertation articles	37% (91)	56% (138)	2% (6)	2% (4)	<1% (1)	1% (2)
As chair, I expect to be first on presentations about their dissertation	29% (35)	60% (72)	0% (0)	5% (6)	2% (2)	1% (1)
As committee member, I ask for authorship on dissertation articles	33% (80)	39% (96)	12% (29)	10% (24)	4% (10)	2% (4)

As committee member, I ask to be on presentations about their dissertation	34% (41)	46% (56)	7% (8)	8% (10)	0% (0)	1% (1)
Encourage students to add others to presentations even if not involved	19% (23)	60% (72)	8% (10)	7% (9)	2% (2)	0% (0)
Ask students to add me when I need a presentation	17% (21)	74% (89)	3% (4)	2% (2)	0% (0)	0% (0)
Ask colleagues to add me when I need a presentation	15% (18)	69% (83)	7% (9)	3% (4)	2% (2)	0% (0)

Note: Response options: 1=No Experience, 2=Never, 3=Seldom, 4=Sometimes, 5=Frequently, 6=Always. Items about article authorship (N = 246). Items about presentations (N = 121).