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Time Management, Passion, and Collaboration: A Qualitative Study of Highly Research Productive Counseling Psychologists

Ryan D. Duffy,1 Carrie L. Torrey,1 Elizabeth M. Bott,1 Blake A. Allan,1 and Lewis Z. Schlosser2

Abstract
The present study interviewed 17 of the most research-productive counseling psychologists within APA-accredited counseling psychology programs. Using Consensual Qualitative Research, seven domains emerged from the interviews: root of productivity, personality characteristics, productivity strategies, work environment, nonwork life, impact, and tips. Within these domains, 13 general categories emerged and 19 typical categories emerged. Overall, these participants were successful early in their careers, received mentorship/support while in graduate school, chose research topics that were salient to them and about which they were passionate, effectively managed their time, collaborated well with students and professionals, had a structured approach to writing, worked in a supportive research environment, and spent a considerable amount of time outside of work with family.

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or participating in hobbies. Based on the results, practical suggestions are offered for individuals within the field of counseling psychology who wish to be productive researchers.

**Keywords**

research productivity, counseling psychologists, qualitative, research training

What does it take to attain and maintain research productivity? This type of question is likely pondered every year by hundreds of individuals associated with counseling psychology training programs (and likely most other academic fields)—from the first-year student eager to get involved in research to the new faculty member working toward tenure (see Cohen, Morgan, Delillo, & Flores, 2003) to the late career professor wanting to keep her or his research program active and thriving. Indeed, research productivity affects the lives of graduate students and faculty alike who are eager to gain or succeed in highly competitive academic positions. Unfortunately, research about how to become and remain productive is sorely lacking within the scholarly literature, and as such, individuals interested in being productive largely rely on anecdotal evidence from a small number of mentors and colleagues. In the present study, we seek to address this shortcoming by interviewing the most research-productive faculty within counseling psychology training programs. Specifically, the main goals of this study are to (a) understand the commonalities among participants in becoming productive (e.g., experiences in graduate school, experiences in initial professional jobs) and (b) understand the commonalities among participants in maintaining productivity over time (e.g., personal characteristics, productivity strategies).

In line with previous scholars (Duffy, Martin, Bryan, & Raque-Bogdan, 2008; Huang, Lin, & Chen, 2011), research productivity is defined as a combination of an individual’s scholarly output (journal publications) with the impact of this output (citation count). Although there are certainly critiques to this definition—mainly noting the lack of inclusion of grant activity and book chapter publishing and the tendency of this metric to reward those with longer careers—within the field of productivity assessment, this is the most agreed upon conceptualization of the term (Duffy, Jadidian, Webster, & Sandell, 2011). At the most basic level, research productivity refers to the quantity and quality of a scholar’s journal publications. Like most areas of work, productivity is a key determinant of job attainment and success within academia, especially counseling psychology training programs. Graduate
students and new professionals who are more productive are more likely to attain a faculty position within these programs, and faculty who are more productive are more likely to earn tenure, promotion, and merit raises. The clear importance of productivity within the scholarly community likely makes an in-depth examination of productivity paragons highly useful to students, new professionals, and tenured faculty. Given the current study’s focus on counseling psychologists, the following sections review how productivity has been studied specifically within counseling psychology, and an outline of the contributions of the present study is provided.

Research on Research Productivity Within Counseling Psychology

The study of research productivity within counseling psychology has generally explored (a) what relates to graduate student productivity, (b) what relates to faculty productivity, and (c) who and what are the most productive individuals, programs, or schools in specific journals or on specific topics. The latter of this group has received the most attention within the literature, and we begin this review by briefly highlighting this approach to studying productivity.

People and Programs. Counseling psychologists have a long history of being interested in who are the most productive people and what are the most productive programs. This topic is the easiest to study, because it involves sorting or counting journal articles and/or citations from publically accessible databases, therefore not requiring researchers to collect new data from current students or faculty. These types of studies generally explore what persons and/or programs have been the most research productive over certain periods of time in general or in specific journals or areas of research. For example, a large number of studies over the last 50 years has been completed that notes the most published people or programs in the Journal of Counseling Psychology (e.g., Buboltz, Deemer, & Hoffman, 2010; Buboltz, Miller, & Williams, 1999). Additionally, studies have examined the productivity of individuals within the areas of LGBT research (Smith, 2010), multicultural vocational research (Flores et al., 2006), psychotherapy process research (Hill, Nutt, & Jackson, 1994), and the study of ethnic and minority populations (Perez, Constantine, & Gerard, 2000).

These types of studies provide information about a particular topic or journal that can aid readers in understanding the relative scholarly contributions of individuals and programs. At a basic level, these studies feed a natural academic curiosity of who or whom is adding to the scientific literature.
Unfortunately, these studies do little to inform readers why individuals or groups of individuals are more productive than others. The next two categories of studies have attempted to answer the question of “why” in an empirical fashion, looking at important correlates and predictors of productivity at the graduate student and faculty level.

**Student Productivity.** A number of studies have examined correlates or predictors of productivity specifically with counseling psychology graduate students. Building off work on research interests and the research training environment (e.g., Hollingsworth & Fassinger, 2002; Mallinckrodt & Gelso, 2002; Mallinckrodt, Gelso, & Royalty, 1990; Phillips & Russell, 1994; Royalty, Gelso, Mallinckrodt, & Garrett, 1986), several studies have utilized a social cognitive framework to explore what leads students to be interested and active in research. For example, Kahn and Scott (1997) found research productivity to be predicted by program tenure, research interest, and research self-efficacy; in turn, research interest was predicted by investigative vocational interests, and research self-efficacy was predicted by a supportive research training environment and program tenure. Kahn (2001) extended this model, again finding productivity to be a function of interests, self-efficacy, and tenure. Additionally, Kahn (2001) included outcome expectations into the model, finding that students’ expectations of success within the research process predicted research interests, which were predicted by investigative interests and a supportive research environment. These findings were analogous to those of Bishop and Bieschke (1998), who focused specifically on the prediction of research interests.

Deemer, Martens, Haase, and Jome (2009) added another piece to these conclusions by finding approach goals to mediate the relation between a supportive training environment, outcome expectations, and research interests; a reason why students in supportive environments had more positive outcome expectations and were more interested in conducting research was because they had developed more research-specific goals. Taken together, these studies suggest that students are productive when they are interested in research and are confident in engaging in research. Students are more likely to be interested and confident if they have a supportive research training environment and have higher investigative interests. Findings such as these have informed the training of students within counseling psychology doctoral programs (see Betz, 2005; Bieschke, 2006), and as a field, a high degree of emphasis is placed on graduating students with research skills and achievements. But what does our knowledge of productivity predictors look like when we are not studying trainees but the trainers?
**Faculty Productivity.** Unfortunately, research on the correlates and predictors of faculty productivity, especially within counseling psychology, is extremely limited. This is most likely due to the great difficulty of collecting empirical data from large groups of current faculty. As such, in contrast to the social cognitive approaches with graduate students, to date no theoretical models exist that attempt to explain why counseling psychology faculty would be productive. However, there certainly is a tradition of studying counseling psychology faculty, mostly through qualitative research, with topics including the advisor-advisee relationship (Knox, Schlosser, Pruitt, & Hill, 2006; Schlosser & Kahn, 2007), the pursuit of full professorship (Pruitt, Johnson, Catlin, & Knox, 2010), the experience of racial microaggressions (Constantine, Smith, Redington, & Owens, 2008), and career serendipity (Williams et al., 1998), among others. To date, three studies exist that have focused specifically on counseling psychology faculty productivity, each of which used quantitative methods.

Royalty and Magoon (1985) surveyed 296 faculty members, who were an average age of 44, in counseling psychology programs. Participants completed the Scholarly Productivity Survey, which contained a range of questions related to research activities and attitudes, and participant research productivity was measured by the number of articles published in the Social Science Citation Index between 1969 and 1981. Based on total number of publications, the authors conducted t tests exploring mean differences between high (nine or more publications) and low (one or zero publications) producers. Instead of attempting to paraphrase their findings, consider this quote from the results section:

The results of the analyses portray the high producer as a person who has graduated with a doctorate at a younger age, was interested in research while in graduate school, feels that the graduate school experience prepared him or her for the difficulties experienced in getting published, and who perceived his or her graduate program as expecting the student to produce research. In addition, the high producer is more likely to be around colleagues who publish and to attend APA conventions; is more interested in the intellectual stimulation research provides and less in the practical applications; enjoys scholarly and experimental activities more and practical, applied activities less; and views research as more valuable, more satisfying, more intrinsically interesting, and more important in his or her work week. The high producer is more likely to be involved in a program of research that
stimulates additional related studies, rather than in studies that are unrelated to each other. High producers dislike the detail work of research less than low producers. (p. 460)

This concise description of high producers is likely a good match for an anecdotal image of a productive scholar: they are prepared, come from a strong graduate program, and are confident, interested in research, programmatic, and collegial.

The second study to examine the productivity of counseling psychology faculty was completed by Krebs, Smither, and Hurley (1991). The authors surveyed 260 faculty and examined the link between vocational interests, perceptions of the research environment, and research productivity, as measured by the number of publications divided by year since graduation. Faculty productivity was significantly, but weakly, correlated with investigative interests, early research involvement, viewing research as a social experience, viewing all research as flawed, and doing research related to practice. Finally, Liddle, Westergren, and Duke (1997) surveyed 51 faculty in counseling or counseling psychology programs regarding the link between the time spent on specific activities and productivity. The authors found that, although high and low producers spent an equal amount of time teaching and doing service, high producers spent, on average, 7 hours more per week on research activities and were substantially more efficient with the use of their research time.

These three studies mark the scope of the literature on the research productivity of faculty in counseling psychology programs. The results are important and shed some degree of insight on what productive faculty members might look like. Indeed, a number of these predictors for counseling psychology faculty, such as research interests, a supportive graduate training environment, and early research involvement, match findings on the productivity predictors of faculty in industrial/organizational psychology (e.g., Bowling & Burnes, 2010; Judge, Kammeyer-Mueller, & Bretz, 2004; Williamson & Cable, 2003).

Summary. The three groups of research discussed above highlight a long tradition of interest in research productivity within counseling psychology. To date, most of the knowledge in this area concerns tracking productive people and programs within specific journals or on specific topics, or studying what predicts graduate student research interest and activity. Substantially less is known about faculty research productivity, with just three studies being completed on the topic. These studies suggest that productive faculty were more likely to have investigative interests, spend more time on research,
come from a supportive graduate school environment, be involved in research early, be programmatic, and build collegial relationships. However, no theoretical framework has been established focusing specifically on the predictors of faculty productivity. This highlights the importance of studying this topic in a qualitative manner, whereby research is conducted without formal hypotheses, and the interview data are used to help build hypotheses for future research (Hill et al., 1994).

The Present Study

In the present study, we seek to add to the literature on research productivity within counseling psychology by interviewing highly productive faculty within doctoral training programs. Using a top down approach that focuses on the most cumulatively productive faculty (i.e., those with the greatest combination of publications and citations across all years), we have two main goals. First, we are interested in how these scholars became productive. To address this aim, part of the interviews will focus on early general life experiences, experiences in graduate school, and experiences in initial professional jobs. Second, we are interested in how productivity is maintained over time. To address this aim, part of the interview will focus on the personal characteristics of these individuals, their work environments, the strategies they employ to sustain productivity, and how they integrate their work and personal lives. Finally, we encourage these scholars to provide tips on becoming productive and sustaining productivity. We believe that these findings will be of great utility and interest to those within the field of counseling psychology, especially students and faculty whose professional lives are impacted by their research productivity.

Method

Participants

Interviewees. Interviewees were 17 faculty members within APA-accredited counseling psychology programs, 14 of whom were male and 3 of whom were female. Participants were asked to identify their racial and ethnic backgrounds, and the group was predominantly White, with ethnic backgrounds of primarily European descent. The average years in the field for the entire group (measured by year of first publication) was 30.44 (range = 24 to 37) and participants had published an average of 78 journal articles as listed in the Social Science Citation Index and had been cited on average 1,787 times.
Additional demographic data were not assessed to ensure confidentiality among the participants. Based on the fact that we included more than 12 subjects, we concluded that we collected an adequate amount of evidence to make conclusions from the data (Morrow, 2005).

**Research team.** The research team was made up of five individuals: a 29-year-old male, a 27-year-old female, a 25-year-old male, a 25-year-old female, and a 39-year-old male. Two members of the team were faculty at counseling psychology programs, and three members were doctoral students in a counseling psychology program. Four team members had previously conducted qualitative studies (two had used Consensual Qualitative Research [CQR]; Hill, Thompson, & Williams, 1997; Hill et al., 2005), and one team member had no experience with qualitative research. All team members read the 1997 and 2005 CQR articles by Hill et al., and the team met several times prior to commencing interviews to ensure that all members had a strong knowledge of the methodology. Specifically, team members reviewed the general steps associated with the CQR process, discussed the importance of all team members having equal input, and reviewed the coding procedures. All team members were authors of the study.

Additionally, prior to developing the interview protocol, all team members participating in the interview and coding process followed the CQR guidelines and discussed their biases in terms of what responses would be expected from participants. All members felt participants would have an organized work structure and would feel that their work was important to them. Three members felt that participants’ career paths would be serendipitous. Two members felt that participants would derive meaning from their work, would express having social support, would be highly decisive, and would have poor work-family balance. Finally, one member felt participants would experience pressure to be productive. These biases were also discussed among the team members prior to the coding process, and members were encouraged to consider these biases when coding each interview.

**Measures**

**Interview protocol.** In an effort to fulfill the dependability criterion suggested in the literature, the team members created a structured research design before data were collected, and all research processes were carefully recorded. As a result, the team members established a clear data collection process for this study, allowing for clear data themes and categories (Morrow, 2005). To begin, the research team worked together to assemble a semistructured interview that addressed the two main goals of the study: how individuals became
productive and how productivity was sustained over time. Questions were developed based on a review of studies within the field of psychology and the subfield of counseling psychology that have focused on predictors of productivity among faculty. Included questions concerned the participants’ general career paths, their current work experiences, the process by which they conduct research and write articles, and personal qualities that have contributed to their productivity. Additionally, participants were encouraged to discuss tips they would give to new researchers (see the appendix for complete interview protocol). In accordance with CQR suggestions of using a semistructured protocol, answers to these general questions were followed by more specific questions when necessary.

Furthermore, the interviewer engaged in a participatory consciousness by engaging with the participant rather than by solely observing. The interviewer’s ability to empathically relate to the participant’s process allowed a more in-depth discussion of the topics presented. Thus, the interviews were personalized in an effort to present fair data (Morrow, 2005). Finally, as a result of adequate development of the interview strategy (process of developing, selecting, and asking questions; the style of the interview), we can ensure adequate quality, length, and depth of the interview data (Morrow, 2005). The interview was pilot tested with a productive faculty member at a counseling psychology doctoral program prior to commencing formal interviews. Based on feedback from the pilot interviewee, several questions were adapted to more specifically target research productivity (as opposed to general feelings about work).

Procedure

Recruitment. Based on the questions and hypotheses the researchers developed to guide the interviews, participants were selected using a criterion-based sampling method (Top 20 most quantitatively productive counseling psychologists) (Morrow, 2005). To determine the most productive faculty, we used a database from a prior study that had calculated the research productivity of all current counseling psychology faculty (Duffy et al., 2011). In this study, the total number of publications and citations for each faculty member was coded using the Social Science Citation Index (SSCI). These metrics were calculated for each faculty member by two independent raters, and in the case of disagreement, consensus was reached with the aid of a third independent reviewer. For the purposes of this study, we used the total number of publications and total number of citations noted for each faculty member from this database and combined these two values to form a total cumulative
productivity score. Faculty members were then ranked according to these values, with article count and citation count getting equal weight in these rankings. It is important to note that using these metrics to determine productivity necessarily rewarded faculty with longer careers, who had more time to publish articles and garner citation counts. This selection method was chosen due to the desire to understand how productivity is sustained over time, thus making faculty who are the most cumulatively productive attractive for this study. The limits of this approach are discussed in further detail in the Discussion section.

Based on these rankings, the Top 20 most productive faculty members were contacted via email and asked if they would be willing to be interviewed about their research productivity. The interview protocol was included within the email. Of the participants contacted, 17 agreed to an interview, 1 declined an interview, and 2 did not respond to the request or follow-up request. After the analysis was completed, in order to provide trustworthiness to the data, participant approval was obtained for the usage of interview quotations in the article.

**Interviews.** Participants were interviewed over the phone by a doctoral student in counseling psychology, after giving their informed consent. Each interview was completed during the 2010-2011 academic year and took approximately 1 hour. Participants were given the opportunity to make any additional comments at the end of the formal questions. Follow-up interviews were not conducted, as all pertinent information was attained during the initial interviews.

**Transcription.** All phone interviews were audio-recorded, and transcription was completed by a team of undergraduate research assistants. In order to increase trustworthiness and accurately represent the experiences of participants, all audio recordings were transcribed by research assistants who were naïve to the hypotheses developed by the research team (Morrow, 2005).

**Data Analysis**

The recently updated CQR analytic strategies proposed by Hill et al. (2005) were used to code and interpret the interview data. Also, in an effort to increase trustworthiness of the data, the research team made an attempt to protect against any negative consequences of utilizing the researcher-as-instrument approach. For example, the team used peer researchers to gain credibility, practiced research flexibility by reflecting on personal attitudes when making conclusions about the data, used an auditor, created frequency tallies to prevent researcher bias from consuming the interpretations, and
consistently discussed hierarchical power within the team of researchers (Morrow, 2005).

**Coding of domains.** Four of the five team members participated in the coding of the domains, core ideas, and categories, with the fifth member serving as auditor. For the domain coding, each member independently reviewed each interview, and then the team met to compare results. The first two interviews were used to determine a general framework of the domains, and this framework was used to analyze the remaining 15 interviews. Over the course of the coding process, adjustments were made to the domains and/or wording of the domains. When this occurred, previously coded interviews were re-analyzed to fit with the updated version of the domains. Throughout the coding process all members of the team were encouraged to provide equal contributions to the decision making, and consensus was used when disagreements arose.

**Coding of core ideas.** After all interviews were domain coded, the team proceeded to construct core ideas for each interview. This process involved reading over an interview and providing concise descriptions for what the participant was saying for larger sections of text within a specific domain. For this process, the research team met as a group and collectively coded the core ideas within each interview. Team members would read over each section of text together, and for each section, one team member was assigned to present an initial coding of that text. The team as a whole then proceeded to work from this initial coding to come to consensus on the core idea for each section of each interview. As in the domain coding, all members were given equal power, and emphasis was placed on reaching consensus.

**Cross-analysis.** The final step in the coding process was cross-analysis, which consisted of the research team reviewing each interview and placing participant responses into categories. Like the core idea coding, the research team met as a group to complete this step. The first four interviews were used to construct a general outline of the categories, with a number of categories added or adapted as more interviews were coded. Categories were created that best represented the core ideas, and again through consensus among team members, these categories were given appropriate labels. During the initial review, 138 categories emerged and the research team worked to consolidate some of these categories in accordance with CQR guidelines to allow for a manageable number of categories. After this consolidation, categories were retained that were endorsed by at least three participants, and the list of categories was finalized once consensus had been reached on the data from each interview. Given the large number of interviewees, Hill et al.’s (2005) guidelines for categories being coded as “general” was slightly adapted.
Instead of the suggested metric (endorsement by all or all but one participant), it was decided to label categories “general” if all or all but one interviewee endorsed it. As such, we coded a category as “general” if 15 to 17 participants endorsed it, “typical” if 9 to 14 endorsed, and “variant” if 3 to 8 endorsed. An analogous adaptation was completed in a CQR study by Knox et al. (2006), who interviewed 19 participants and coded a category as “general” if all or all but one or two participants endorsed it.

Auditing. Following the guidelines by Hill et al. (2005), auditing took place at two stages: after the coding of core ideas and after the coding of categories. The auditor was an associate professor in a counseling psychology doctoral program with expertise in the research area and qualitative research. The auditor assessed the validity of the domains, core ideas, and categories. Auditor comments and suggestions were discussed by the research team, and once consensus was reached based on these comments, this feedback was incorporated into the final list of domains, core ideas, and categories.

Results

The categories and their codes (general, typical, or variant) are displayed in Table 1. As noted in Table 1, there were a large number of categories represented across all 17 interviews, indicating diversity among the respondents in how productivity was attained and sustained. However, out of this large group, a number of common categories emerged, and the following sections highlight categories that were coded as general or typical within each of the seven primary domains. Participant quotations have been included to support researcher interpretations and thus increase trustworthiness of the data presented (Morrow, 2005).

Root of Productivity

This root of productivity domain concerned life experiences and events that occurred prior to participants becoming highly productive and/or events or life experiences that shaped participants’ research interests. Within this domain, three general categories emerged: indirect route/serendipitous events, graduate school mentors/role models, and research interests stemming from personal experiences. Many of the participants discussed being interested in other areas of work or majors prior to psychology, having difficulty getting into graduate school, beginning their professional career doing either primarily practice or a combination of research and practice, chance events occurring, and experiencing numerous other challenges and hurdles throughout their early career path. For example, one participant stated:
Table 1. List of Domains and Categories

<table>
<thead>
<tr>
<th>Domain</th>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Root of Productivity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indirect route/serendipitous events</td>
<td>General</td>
</tr>
<tr>
<td>Graduate school role models/mentors</td>
<td></td>
<td>General</td>
</tr>
<tr>
<td>Research interests from personal experiences</td>
<td></td>
<td>General</td>
</tr>
<tr>
<td>Early involvement in research/counseling</td>
<td></td>
<td>Typical</td>
</tr>
<tr>
<td>Early research success</td>
<td></td>
<td>Typical</td>
</tr>
<tr>
<td>Early enjoyment of research</td>
<td></td>
<td>Typical</td>
</tr>
<tr>
<td>Nonacademic upbringing/limited resources</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Undergraduate role models/mentors</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Supportive research environment</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Early professional struggles/barriers</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Early professional role models</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>No research mentors</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Programmatic research</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Family influence</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Early collaborators</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Intellectual mentors</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td><strong>Personal Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research enjoyment/passion</td>
<td></td>
<td>General</td>
</tr>
<tr>
<td>Gratitude</td>
<td></td>
<td>Typical</td>
</tr>
<tr>
<td>Enjoys teaching/counseling</td>
<td></td>
<td>Typical</td>
</tr>
<tr>
<td>Hard worker</td>
<td></td>
<td>Typical</td>
</tr>
<tr>
<td>Good writer</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Independent worker/thinker</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Creativity</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Likes working with students</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Gets up early</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Curiosity</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Organized/efficient/detail-oriented</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Likes variety</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Ambitious/wants impact</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Thick-skinned</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Reflection/learns from mistakes</td>
<td></td>
<td>Variant</td>
</tr>
<tr>
<td>Time management</td>
<td></td>
<td>General</td>
</tr>
<tr>
<td><strong>Productivity Strategies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration with students</td>
<td></td>
<td>General</td>
</tr>
<tr>
<td>Collaboration with professionals</td>
<td></td>
<td>General</td>
</tr>
</tbody>
</table>

(continued)
Table 1. (continued)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Graduate student management</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td>Planful writing</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td>Symbiotic collaboration</td>
<td>Typical</td>
</tr>
<tr>
<td></td>
<td>Planful research/programmatic</td>
<td>Typical</td>
</tr>
<tr>
<td></td>
<td>Unstructured writing approach</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Task overlap</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Works from home/after hours</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Nonresearch activities barrier</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Social support from collaborators</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Interdisciplinary research/collaboration</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Methodologically minded</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Chooses projects wisely</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Difficulty delegating</td>
<td>Variant</td>
</tr>
<tr>
<td></td>
<td>Work-life separation</td>
<td>Variant</td>
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<td></td>
<td>Information seeker</td>
<td>Variant</td>
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<td></td>
<td>Work-life integration</td>
<td>Variant</td>
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<tr>
<td>Work Environment</td>
<td>Supportive research environment</td>
<td>General</td>
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<td></td>
<td>Work environment fit</td>
<td>Typical</td>
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<td></td>
<td>Gratitude for environment</td>
<td>Typical</td>
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<td></td>
<td>Demanding/unsupportive work environment</td>
<td>Typical</td>
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<td></td>
<td>Daily task variety</td>
<td>Typical</td>
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<td></td>
<td>Mentors students</td>
<td>Variant</td>
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<td></td>
<td>Administrative responsibilities</td>
<td>Variant</td>
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<td></td>
<td>Concerns about funding</td>
<td>Variant</td>
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<td></td>
<td>Flexible work schedule</td>
<td>Variant</td>
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<tr>
<td>Nonwork Life</td>
<td>Nonacademic hobbies</td>
<td>General</td>
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<tr>
<td></td>
<td>Work-life balance/family time</td>
<td>General</td>
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<tr>
<td></td>
<td>Supportive spouse/partner/family/friends</td>
<td>Typical</td>
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<td></td>
<td>Exercise</td>
<td>Typical</td>
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<td></td>
<td>Work-life imbalance</td>
<td>Variant</td>
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<td></td>
<td>Hobbies as rejuvenation</td>
<td>Variant</td>
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<tr>
<td>Impact</td>
<td>Scholarly impact</td>
<td>General</td>
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<td></td>
<td>Preparing students</td>
<td>Typical</td>
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<td></td>
<td>Societal/clinical impact</td>
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<td></td>
<td>Unconcerned about impact</td>
<td>Variant</td>
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<tr>
<td>Tips</td>
<td>Collaborate</td>
<td>Typical</td>
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<td></td>
<td>Study what you love</td>
<td>Typical</td>
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<td></td>
<td>Be persistent/motivated/take criticism</td>
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(continued)
Table I. (continued)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Category</th>
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<tr>
<td>Write well</td>
<td>Variant</td>
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<tr>
<td>Time management</td>
<td>Variant</td>
<td></td>
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<tr>
<td>Be creative</td>
<td>Variant</td>
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<tr>
<td>Be programmatic/planful</td>
<td>Variant</td>
<td></td>
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<tr>
<td>Do not worry about productivity</td>
<td>Variant</td>
<td></td>
</tr>
<tr>
<td>Avoid high personal investment</td>
<td>Variant</td>
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Note. General = at least 15 respondents; Typical = 9 to 14 respondents; Variant = 3 to 8 respondents.

I fell into the psychology major only because I needed to declare, and incidentally, it was the only one I had any courses in, because they were the easiest courses to get into. So it wasn’t exactly planned. And then I liked it, I liked it a lot. Then I decided, well, I’m getting towards my senior year, what do I want to do? I realized I couldn’t do much of anything with a psychology degree. So I decided I did like school even though I didn’t take it seriously so I applied to a wealth of programs and got into none. I went out and worked for about a year and a half.

In discussing the origins of his interest in career research, one participant stated:

“[It was] really serendipitous to have an opportunity as a counseling center psychologist to teach a career development class at a school with engineering on campus. And that provided the opportunity to think about career development to a greater extent than I had in graduate school. And one thing led to another.”

All of the participants noted that their research interests stemmed from their personal experiences, a finding that extended well into most participants’ careers. One participant discussed the interplay of his life passion and religious faith with his research, stating:

So there was a kind of a convergence of this guy showing me that if you want to make an impact you just have to concentrate your forces, and you have to be productive in a [single] area if you want to make an impact. This is with my passion. This is right in line with what
I think it is very important in life—not only in marriage and counseling, but also in what I see in my personal life and my Christian faith.

Almost all of the participants noted encountering either research mentors or role models while in graduate school. For some, this support came in a research capacity, such as helping one publish, and for others this came in the form of emotional support. For example, one participant stated:

He did a very nice job of giving me a lot of emotional support, and we became very good friends. So in that sense, he helped me keep my sanity in this process. He wasn’t a very strong researcher, so I didn’t learn the researcher skills from him, but [he] was a very good role model for how to do stuff.

Along with these general categories, three typical categories emerged: early involvement in research/counseling, early research success, and early enjoyment of research. Though certainly unique, this story from one of the participants was particularly telling and also nicely encapsulated all three of these categories:

We moved to this place that had a chicken coup and we moved from one farm house to another and I was about maybe 10- or 11-years-old. How would you earn some money from chickens? Laying eggs. Ok sure. He [father] didn’t give me an allowance, [so] I had to earn that money one way or another. So I had my 30 something chickens, and he told me “Now you can buy cheap feed or expensive feed, and if you buy the expensive feed they’ll lay more eggs. But what we don’t know is if those extra eggs will cover the cost of the more expensive feed.” My dad said that he did this a lot. He used a lot of scientific farming methods like this with his farm. He said, “Why don’t you feed one kind of feed for a month and then switch to the other kind for another month and keep careful records and then decide which one is best?” So I did that, and you know I found out? My first little experiment showed that actually the cheaper feed was more cost effective even though they laid fewer eggs; the expensive feed couldn’t be justified by the difference. So it was a long time later when I was in college as an undergraduate that I learned about the scientific method.

**Personal Characteristics**

Personal characteristics refer to the traits of the participants, most of which were tied to being productive. Of this group, one general category emerged:
research enjoyment/passion. All of the participants noted an enjoyment for their work and the topics they study. For example, one participant stated:

I always felt like, “Oh I get to do this.” It doesn’t feel like something I have to motivate myself to do; it feels more like something I get to do. And it still is that way for me today. It’s, “Oh you know, I got this hour, I can do this analysis, so I can think about this thing.” So for me it’s the pleasure oftentimes that I get in the work that I do.

When talking about what keeps her motivated, another stated:

Well, I think it’s in essence love. I think I’ve finally learned to live with that. Sometimes I’m really highly charged and bored sometimes. You know, I go through existential crises every six months. I think about why am I doing this, it doesn’t make any difference, nobody reads any of it anyway, we’re not finding cures for cancer, who cares? I do quite often go into the existential funk of why should we bother, what are we doing? And usually I come out at some point and think that I enjoy doing what I’m doing and I’m doing what I’m doing because I want to do it.

Three typical categories emerged: gratitude, being a hard worker, and enjoying teaching/counseling. Most of the participants noted being grateful for their work opportunities and successes. For example, one participant stated, “Well, you know what, it’s funny. I feel like I’ve accomplished so much more in my life than I ever set out to accomplish. Everything else is sort of gravy.” Additionally, most of the participants viewed themselves as hard workers and/or had a strong work ethic. For example, one participant stated, “I had that kind of blue collar mentality … where I could work people under the table.” Another discussed what he was like early in his academic career: “I was a workaholic and very achievement oriented and very curious and willing to work hard. So I’d get into something, and I’d spend a lot of time on it. I think hard work and self-reliance and autonomy were quite important early on.” Finally, most of the participants noted not only enjoying research but also counseling and/or teaching. For example, one participant stated, “A need to teach has been very important. The more I prepare to teach, the more I have to learn. So the more I have to learn, the more I have to be kept up to the minute [that] the research [I teach are] the right things ... to learn.”
Productivity Strategies

By far the most robust domain, productivity strategies concerned the intentional activities participants were engaged in that related to productivity. Five general categories emerged: time management, collaboration with professionals, collaboration with students, graduate student management, and planful writing. Time management, or being able to effectively structure one’s day-to-day work life and associated tasks, was endorsed by every participant. For example, one participant stated:

What I tried to do is save, big factor in that save, two days a week for writing, or whatever we’re reading or whatever I need to do. So then I teach two days a week. I always try to set aside two days, and that’s just for writing or reading.

Another participant stated:

“When I’m really tired or it’s the end of the day and I’m dragging in energy, it seems like I can always crank it up to do a little bit of SPSS or compare a table or you know describe the results of an analysis that I’ve done.”

All of the participants noted collaborating with students on research projects, and all but one of the participants noted collaborating with professionals. In each case, participants discussed taking part in team projects, which ultimately led to greater scholarly output. For example, one participant stated:

I literally always work with my students. Earlier, I was in a department that was very traditional, [and] I had to be a single author a lot to be promoted to full professor. So I went out, conceptualized a research project, came back in, analyzed it, wrote it up, published it. I had to do that. And I know I can, it’s just that I prefer to work with my students.

Another stated:

“Fortunately, though, since I’ve been working for over 20 years as an academic, I [have] developed a network of colleagues around the country that I’ve been working with, and so I’ve continued to work with them. We continue to publish papers together.”
All but one of the participants also noted the importance of properly managing graduate students, ranging from having strict procedures on which applicants to select for the graduate program to providing various types of structure to ensuring graduate student success and in turn, their own productivity. For example, one participant stated, “I select graduate students. [We] only want the best students, the best counseling students in the country. I work hard, and I’m sure that they’ll work hard.” Another stated:

In terms of my working with students, that varies. I look to the student to kind of help me understand the best way to work with them. Some students, like my advisees, they work right with me. Some students, I give them a task, they go away, they come back and they’re done. It varies … some want a lot of structure, some don’t need it. I can’t say that there’s [one] way I’ve worked with students. I rely on some students to tell me how they want to work.

Finally, all of the participants noted being planful in how they approach scholarly writing. Although there was no one method for writing a manuscript, all of the participants noted some type of structure that guided their approach to this task. For example, one participant discussed his approach to writing with collaborators, “One of the things, if I’m going to write—I write the whole thing. I don’t like the idea of you write this part, I write that part. I’ll either write the whole thing or not write at all.” Another participant discussed the order in which he writes different sections of the manuscript:

Well, I probably approach things differently than some people do. I try to write the results first. That is, I do the data analysis and write up the results first. There is a reason for that, and I stumbled into it. Sure, research questions and issues drove the research, but for me, they do not always help write the paper. In organizing the results and tables and wrapping my head around how they tell a story, a feel or flow of the argument emerges. There’s almost a gestalt that falls out for me, a kind of; “Oh, ok, that is how we do it.” Now that, in turn, helps me organize not only the discussion, but also the introduction as well. Thus, for me, working out the flow and story of the results first helps me tremendously in writing the rest of the paper.

In addition to these general categories, two typical categories emerged from the data: symbiotic collaboration and planful/programmatic research. Symbiotic collaboration refers to participants, purposeful collaboration with
other people who are a good fit for them and/or accentuate areas where they are weak. For example, one participant discussed his experience with a frequent collaborator: “He and I collaborated on a lot of stuff so what was important was we were interested in the same things. I know we respected what each one of us brought to it, and we liked each other. And our working styles fit together.” Planful/programmatic research refers to participants being thoughtful about the research they will conduct in the future and/or having a set area of research they have pursued over time. For example, one participant noted:

“Every other week we meet with people working on the grant project and strategize and talk about where are we now and what needs to be done and who should do what. And sometimes I plan that out ahead of time, who I think would be best to do what. But not always.”

Work Environment

This domain refers to participants’ experiences of their current work environment on a day-to-day basis, especially as it relates to their research productivity. The one general category in this domain was supportive research environment. All but one of the participants viewed their current program or department as supportive of their research efforts. For example, one participant stated:

“That’s kind of what it’s like at my current university in that we’ve got a terrific group of scholars, and I’ve learned lots of things by talking to them and reading their work. But there’s also a sort of intangible source of inspiration. Just seeing how productive they are makes me want to ratchet my game up and be a better scholar myself.”

Another stated:

The department is terrific. The department used to be contentious, not a really nice place to work. A couple people left, a couple of people died, and the last few years have been wonderful. We all get along with each other. It’s a high powered environment, but it’s intellectually rich, [with] smart people, and we’re nice to each other. That’s the department.

Four typical categories emerged from the data. These included daily task variety, work environment fit, gratitude for the environment, and demanding work environment. Most of the participants reported not having a typical work day but that their tasks differed day to day and even week to week, each
day being composed of multiple tasks. For example, when asked what a typical day looks like, one participant stated:

That’s really hard to say. This semester, I’m teaching one course. I have four clinical hours, four psychotherapy hours, and an advanced psychotherapy practicum, so I supervise a couple people a week, actually three. But I’m only in three days a week so it’s hard to say what a typical day is like.

Most of the participants felt that their work environment was a good fit for their interests and skills as scholars. For example, one participant stated, “It’s a great professional environment in the department of psychology, which many counseling psychology programs, as you know, aren’t [in]. And that’s good for me.”

Additionally, most participants noted being both thankful for their work environment while also viewing it as demanding, often due to student concerns and administrative responsibilities. One participant stated, “I’ve been fortunate that, in the places I’ve worked, there’ve been really strong norms about involvement in research; so it’s like, you know we don’t really have to do any work. It has a momentum of its own.” Regarding the demands of the environment, another stated, “It’s always a challenge, I think. It doesn’t get any easier, even though I’ve been doing it so long. It always feels like there are so many things to juggle. And sometimes I feel like I’m on top of it, and sometimes not.”

**Nonwork Life**

The nonwork life domain refers to the interests and activities of participants outside of work. Within this domain, two general categories emerged: non-academic hobbies and work-life balance/family time. All but one of the participants discussed taking part in hobbies that had nothing to do with research, ranging from hiking, to fishing, to traveling, to volunteering, to art. For example, one of the participants stated:

“I played a lot more music, the very act of a leisure lifestyle. For 13 years I was involved in a bar band in one way or another. That’s always been a great stress relief. It’s always kind of interesting to get to do something for a hobby that you actually get paid for.”

Another participant stated:

I ballroom dance about 4 or 5 times a week. *Dancing With The Stars* has this traveling road show that goes around and plays coliseums all
over the country. In our city, we had a big competition for ballroom dancing. I don’t usually competitively ballroom dance, but I’ve danced a lot. So it turned out that this well-known woman dancer’s partner got injured the night before the competition. So she asked me if I would dance with her. We ended up getting in the top 10, getting to perform in front of 7,000 people.

Regarding work-life balance/family time, all but one of the participants noted that this was particularly important to them. For example, one participant stated:

At 3:30, I left, no matter what was happening. We could be in the middle of a CPT meeting, that’s the committee on promotions and tenure, and I walked out, because I was the one responsible for picking up the kids after school. My wife was responsible for the morning so she got them out, got their lunches, and all that sort of thing, but her work would typically go until 6:00, 6:30, 7:00 o’clock. So from 3:30 (p.m.) on, I was in charge. I get the kids, we’d do whatever we’re doing, and I would have supper prepared at 6:30 or 7:00, and then the family would eat together.

Another participant noted the importance of and difficulty with creating time for nonwork activities, stating, “Something my wife and I did were things like, at the beginning of the semester schedule a getaway weekend once a month. And we would go someplace that weekend. … So you just have to schedule those things.”

Participants typically noted having supportive family and friends and exercising. For example, one participant stated, “Certainly, you know, my wife has been a constant source of social support for me over the years, and the network of colleagues that I mentioned earlier has been enormously helpful to me.” Additionally, another noted, “I think the main part of my unwinding is exercise and music. Just cardio exercise. Nothing like playing soccer, or something cool like that.” Finally, regarding work-life balance, one participant stated, “Balancing things out now is easier in some ways. But I have lots of things that I like to do, non-academic [things] that kind of keep me juiced.”

Impact
The impact domain refers to participants’ perceptions that their work has made an impact in some fashion. This was the smallest domain and contained one general response (scholarly impact) and two typical responses (preparing students and societal/clinical impact).
Almost all participants felt that their work had made an influence in the scholarly community. For example, one of the participants stated:

Well, the impact. Of course these days almost anyone can go online and you can see who’s citing your work and how often it’s been [cited]. I think it’s very humbling and it’s been humbling for me to go to the web of science and see how many things I’ve published that were not cited. I have articles that no one has ever cited. So I mean, what’s that all about? That was a much less important study than I thought it was. Or maybe they’d only been cited 4 or 5 times in 10 years. But then what’s also interesting is there were some studies that I thought were OK but just were not fantastically wonderful and you’d be surprised at how many times they’ve been cited.

Additionally, most participants felt they had made an important contribution to clinical work or society. For example, one participant noted that while she had not developed a theory or treatment manual, she felt her work in psychotherapy research had affected how others do clinical work. Finally, most participants felt that, over the course of their career, they had provided positive mentorship and guidance to graduate students. For example, one participant noted, “Realistically, you are not going to live on in your [own] work, you are going to live on in your students.”

Tips

The final domain concerned tips that the participants would provide to aspiring researchers. A great number of tips were offered, but only three were typical: collaborate, study what you love, and be persistent/motivated. Most participants were encouraging of finding people to collaborate with on research. For example, one participant stated:

“I look at people, and they go through graduate school, and some find a very nice connection, some don’t. I’m sure the quality is very different if you don’t. If you can find one, I’m sure it makes a difference, because there’s more to graduate school than just practical learning and facts. It’s making a connection.”

Additionally, most participants endorsed studying topics that one is especially interested in or passionate about. For example, one participant stated, “I think what’s important is figuring out what you really like and devoting a lot of time
to that and doing the other things enough to get by. Because you can’t do everything.” Another stated, “I think that’s the advice I would give. Really do something you’re passionate about and get up early, work hard, be creative.”

Finally, most participants encouraged students to have a thick skin and be persistent and motivated. For example, one stated:

That sense of motivation for the long run, it has to be intrinsic. The people who I see stall out are the ones who are working mainly for the extrinsic awards: for the praise of someone else, or to win an award, or to get a grant or to be funded. Those things may be important, but I just don’t think that we can sustain a research career primarily on the extrinsic rewards. It’s got to be from those intrinsic things that I was mentioning or at least it has to be for me.

Discussion

The results from these 17 interviews, with some of the most research productive counseling psychologists, paint a rich picture of their lives both in and out of work and shed considerable light on the two main goals of the study: how productivity is attained and sustained. In considering the results of this study, it is important to underscore the uniqueness of this group of participants. Demographically, they were mostly male, predominantly White, and had each been in the field for at least 24 years. Additionally, all entered academia at the start of the computer age, prior to the widespread use of the internet, when grant funding was less necessary, but academia was also generally less supportive. With this background in mind, the meaning of these findings is now discussed. As is evidenced by the 7 domains and 80 categories, participants varied in their path to productivity, personal characteristics, working style, and advice to younger scholars. However, there were a number of important consistencies, with analysis revealing 13 general categories (endorsed by at least 15 participants) and 19 typical categories (endorsed by 9 to 14 participants). In the following sections, the meaning of these consistencies is discussed in further detail by focusing on how participants attained and maintained productivity, as well as the broader implications of their work in terms of impact and tips for young researchers.

Attaining Productivity

The “path” to productivity for all of our participants was not simple or perfectly planned out. Indeed, for many the route was indirect, with participants getting interested and productive in research in an unplanned manner. Often
this path was littered with serendipitous, or chance, events that had a positive impact on becoming productive, a finding that fits well with Krumboltz’s (2009) theory of planned happenstance, which highlights how these types of events often have a major impact on a person’s career decision making. During this process, almost all of the participants received support in graduate school, either through a research mentor or from a mentor who provided emotional support. During the span of the participants’ careers, all noted that the topics they researched stemmed from personal experiences, often a topic that was personally salient to them or something they had a great deal of exposure to at some point. Finally, matching findings from Royalty and Magoon (1985) and several studies on the productivity of counseling psychology graduate students (e.g., Kahn, 2001; Kahn & Scott, 1997), more often than not, participants enjoyed and were successful in research early in their careers.

These findings are important for two main reasons. First, they highlight the fact that (at least for the participants) becoming productive was not some well thought out “master plan” but rather was the result of taking advantage of the opportunities provided. A great example of this was participants choosing to research topics that arose from life experiences, as these allowed for sustained interest and motivation. Second, none of the participants became productive alone. Rather, they were helped in some fashion by important mentors in graduate school, and it is likely that early on in one’s career this support is especially important.

**Maintaining Productivity**

The majority of this study focused on how participants maintained productivity over time. First, we were interested to see if the participants had a similar personality style that may have impacted their ability to be productive. Across all categories within this theme, the participants were more different than similar: some got up early, some did not; some were social and some were introverted; some were ambitious, and some were not. The one commonality all of the participants endorsed was a passion for or strong enjoyment of research. For many of the participants, the passion for what they do and study was striking and represented a core component of their overall personal identity. Indeed, of all 80 categories, this one felt like “a must” to maintain productivity.

Additionally, most of the participants were hardworking, gracious, and enjoyed teaching/counseling. The hardworking trait is expected: It would seem nearly impossible to be one of the most productive counseling psychologists without working hard. The other two traits are less obvious. Especially when discussing their successes or positive career events, most participants expressed great thankfulness for others and the opportunities
they were given. Additionally, for most of the participants, research was not
the only part of the job they enjoyed or were passionate about, as many liked
teaching or counseling as well. This fact may be counter to the image of the
professor who only cares about research, as at least in this study participants’
work was more well-rounded.

Second, we were interested in the specific strategies used to promote pro-
ductivity. The importance of time management and planful writing was noted
by all of the participants, although how participants managed their time and
how they wrote was not uniform. Time management strategies might have
been the most discussed category of all 80 within this study, with participants
being very cognizant of how to structure their day-to-day work life and how to
manage a variety of different projects at once. A similar mentality existed when
it came to writing—many of the participants had a very structured approach to
writing, such as starting with specific sections of a paper or blocking off set
periods of time to write. Importantly, no two participants’ styles were the same,
but each had some clear style. Related to these two general categories, most
participants were planful and programmatic in the research they pursued. This
often involved participants focusing on a few specific research areas and hav-
ing different research projects going at various stages. For all three of these
categories, what stood out was the high level of thought that participants had
put in to figuring out what worked best for them in terms of managing their
time, planning research, and writing well. Whereas it was common for partici-
pants to experience chance events that helped their career, with these catego-
ries, participants displayed much more direction and assertiveness.

The three other general categories (collaboration with students, collabora-
tion with professionals, and graduate student management) and a remaining
typical category (symbiotic collaboration) all involved working well with
others. Like the support finding in the root of productivity domain, none of
the participants attained and maintained productivity in a vacuum, but rather
with the assistance of others. This finding is in line with a bulk of research
using a social-cognitive model that highlights the important role that support
has in promoting career development progress and work satisfaction (Duffy
& Lent, 2009; Lent, Brown, & Hackett, 2000). Participants viewed collaborat-
ing as essential, and this also makes intuitive sense: the more good col-
laborators with whom one has to work, the greater the likelihood of producing
a higher quantity of research. However, the key to that process is good col-
laborators. This is why participants talked a great deal about finding collabor-
ators who complemented themselves, which was referred to here as
symbiotic collaboration. In particular, many participants discussed collaborat-
ing with other scholars who made up for their own weaknesses and vice
versa. This is also one reason why participants stressed the importance of graduate student management. As collaborators who are in the most need of training and support, participants noted that working effectively to mentor students was a critical factor in maintaining productivity.

Third, we were interested in how the participants’ work environments served to help or hinder their productivity. All of the participants reported being in a supportive work environment, most expressing gratitude for this environment, with the strength of this support varying from person to person. These findings are in line with a number of studies that have found the research environment to be critical in advancing graduate student productivity (e.g., Deemer et al., 2009; Hollingsworth & Fassinger, 2002) and research with a social-cognitive model linking organizational support with work satisfaction (e.g., Duffy & Lent, 2009; Lent et al., 2011). For some, the support came in the form of just being left alone, whereas for others it came from close relationships with colleagues and/or the administration. Although a big chunk of what it means to be productive concerns sitting in front of a computer writing by oneself, for all of the participants some level of environmental support was noted as important. However, as noted by most of the participants, environments could also be a detriment. The negative impact of one’s environment on productivity most often took the form of high administrative demands that detracted from the work participants were most interested in doing. Indeed, none of the participants cherished these types of tasks, but often spoke of just accepting them as a necessary evil of their job. Even with this downside, most of the participants felt they were a good fit for their environment, often expressing a good match of their strong research interests and skills with what is demanded and rewarded in their current environment.

Interestingly, for most of the participants, the structure of their daily work tasks varied, and often, no one day looked alike during a given week. Although participants frequently endorsed the importance of structure with regards to productivity strategies, the ability to tolerate ambiguity or fluctuations in one’s schedule also seemed important. This is likely due to the wide variety of tasks that all of the participants performed (from teaching, to research, to counseling), which often require very different skill sets. Being able to jump from one of these tasks to another, and sustain research productivity, was a commonality.

Finally, we were curious how the participants spent their time away from the office, and if this in any way impacted their productivity. One of the assumptions going into the interview by two of the team members was that these participants would have poor work-family balance, due to the amount of time and energy required to become highly research productive. Surprisingly, while some participants did note difficulties balancing work...
and family, almost all of the participants talked about the importance of spending time with family and noted receiving work-related support from family and friends. Some of the participants in particular discussed planning their work around family schedules and demands, viewing family time as a higher priority than work tasks.

Apart from family time and support, almost all of the participants noted having hobbies that were unrelated to their work lives and most noted exercising in some fashion. Hearing about the hobbies in particular gave us a more well-rounded view of who the participants were. Certainly, they were all hard workers and dedicated to their job, but they also liked to play and have fun, and often viewed these nonwork activities as integral to helping them stay grounded. For most participants, they viewed exercising as serving a similar function, and many of the participants exercised regularly and emphasized how important it was in managing their daily stress. Perhaps the larger message seen in this domain was that almost all of the participants were, at the end of the day, “normal people” who viewed family time as important and pursued leisure interests that had little to do with their work lives.

**Broader Implications**

In addition to learning about the specific ways the participants attained and maintained productivity, we were interested in the broader implications of their work. Namely, we wanted to understand how participants felt their work impacted others and what tips they might give to younger scholars wanting to be productive. Almost all of the participants felt that their work had made a positive impact on the scholarly literature. Given that this group of interviewees was selected based on their scholarly output, this finding makes intuitive sense. Most of the participants (in this case, 14 of the 17) also noted having an impact on society (usually through intervention programs or popular press books associated with their scholarly work). But the strength of this impact was often tempered by participants, with several noting regret that their work was not more applicable to a wide audience. Most of the participants also discussed the importance of preparing students for future careers, and many took great pride in the mentorship they had provided. Overall, the participants felt strongly that they had made an impact in some form, even though, for some, the opportunities to do so were limited.

With regard to tips, somewhat surprisingly to us, no general categories emerged from this domain, but rather three categories were endorsed by most participants: collaborate, study what you love, and be persistent/motivated. The collaboration and study what you love tips fit very well with the personal
characteristics domain category of research enjoyment/passion and the productivity strategies domain collaboration categories. These two categories, which were generally supported by participants, were also viewed by participants as important for young scholars to endorse. Especially for people early in their career, participants discussed the struggles that come with manuscript rejections and scholarly criticism, and thus noted how being persistent and motivated is critical to maintaining productivity.

Practical Suggestions and Training Implications

The main goals of this study were to understand how highly productive scholars became productive and how they maintained this productivity over time. There was certainly great diversity in participants’ responses for both of these goals, but some important similarities also emerged. Like previous qualitative work with expert therapists (Jennings & Skovholt, 1999), we sought to use these rich data to give a behind-the-scenes look at the lives of these scholars, pieces of which readers may choose to emulate in some fashion. With this goal in mind, based on the data we collected, we present a Top 10 list of practical suggestions for people in the field who want to attain and maintain research productivity.

1. Pursue research interests that stem from personal experiences. Doing so will likely result in the development of more meaningful ideas and increased motivation and persistence.
2. Seek out mentors who can provide both research and emotional support. Especially early on in one’s career, these mentors are critical.
3. Pursue research that you find intrinsically enjoyable and are passionate about.
4. Early in one’s career, be aggressive in seeking out research opportunities, especially those that will help you build skills and result in a successful product.
5. Learn how to effectively structure your work schedule and manage multiple projects at the same time. A good way to accomplish this is by modeling the habits of other highly productive scholars.
6. Collaborate with other scholars, especially those who can make up for skill deficiencies you may have. Analogously, avoid collaborators who are unskilled.
7. Learn how to properly manage graduate students.
8. Be structured in your approach to writing and find a style that works best for you.
9. Attempt to take a job in a research-supportive environment.
10. Have a life outside of work.

These practical suggestions may have important training implications for counseling psychology programs hoping to grow research-productive graduate students. Several of these implications are in line with the empirical and theoretical research that has been conducted by Gelso et al. (see Gelso, 2006) on a positive research training environment. These include involving students in research early (Tip 4), providing research mentorship and support (Tip 2), and creating an environment where research is positively reinforced (Tip 9). Additionally, based on the results of this study, we advise that faculty also: (a) work with students to explore early on what potential research topics are of greatest personal salience and interest, (b) teach strategies for managing multiple research projects at once and supervising students (for many graduate students, this may come in the form of supervising undergraduate research assistants) and teach strategies for writing in an efficient and academic style, (c) promote and encourage the use of collaboration in research and model this among faculty research teams, and (d) encourage a work-life balance that will hopefully facilitate a greater level of energy and focus for research.

Limitations and Future Directions

The results, conclusions, and suggestions from this study need to be considered in light of a number of limitations, each of which may offer opportunities for future research. Like any qualitative study, interviews are naturally self-report measures and the sample used is select and as such, is limited for several reasons (Morrow, 2005). First, the sample was comprised of counseling psychology faculty who were the most cumulatively productive, resulting in the “youngest” person in the sample having been in the field for 24 years. Along with an interest in studying how productivity is sustained over time, the group ended up being senior scholars, because of the inclusion of citation count as a metric for productivity. It is simply impossible for a young scholar to amass the same total citation count or even average citation count per article when compared to a senior scholar who has had the benefit of extra years of people citing their work. As such, this sample may have experienced marked differences in attaining and maintaining productivity in comparison to young scholars today. With the growth of technology (internet, email, social media) and organizations (American Psychological Association of Graduate Students, Early Career Professionals group of Division 17), young scholars might have greater support in becoming productive. However, this is likely linked with
added pressure to publish more and secure external funding, barriers that may have been less prominent with the current sample early in their careers.

The only way to gather a sample of the people most productive at the present time would be to limit the productivity metric only to article counts, over a select period of time that might be considered the “present” (e.g., the last 5 or 10 years). This type of approach certainly has value and would be a great way to conduct a follow-up study that would likely include professionals at all levels. However, the interest in sustained productivity and wishing to include citation counts as part of the metric made us choose our sample accordingly.

Second, the sample was predominantly male and predominantly White. The field of counseling psychology has a longstanding history of studying the barriers faced by women and racial/ethnic minorities and has also focused on the representation of these groups within faculty positions (see Fouad & Carter, 1992; Moradi & Neimeyer, 2005). The participants selected for this study (with selection purely based on research productivity) may not have been confronted with the same level of barriers as those from underrepresented groups. Additionally, given that all had been in the field a long time, they entered the profession at a time when the majority of faculty were male and White. This selection bias may have resulted in these types of barriers getting underreported in the sample relative to the extent they occur with underrepresented faculty. Although a large number of interviews was conducted according to CQR standards (Hill et al., 2005), it might have been useful to target productive faculty close to the Top 20 who were women and/or people of color to make the sample more representative. Indeed, a follow-up study with this group of faculty specifically would be an important direction of future research.

Third, this study focused on faculty who were currently working in counseling psychology PhD programs. Although this allowed for a common shared experience among the interviewees, there are many highly productive counseling psychologists who do not work in counseling psychology PhD programs but in medical schools, other psychology programs, other social science programs, and so forth. Hearing about these individuals’ experiences might also make a unique contribution. Fourth, this study focused on a very specific group of psychologists within one subfield of psychology. As such, little from this study can be validly extended to those outside the field of counseling psychology. However, it is believed that many of these major findings would be applicable to those in all fields of academia. At a minimum, it would certainly be interesting to see how these results overlap with the experiences of psychologists in other fields.

Fifth, the findings from this study may offer an important foundation for future empirical research on productivity. This study highlighted
personality characteristics and productivity strategies that could be studied empirically with larger groups of scholars to determine what best predicts research productivity. Studying these predictors in combination would allow for a clearer understanding of the most important qualities to have as a productive researcher across fields. Finally, this article assessed productivity in terms of article and citation counts, but this is just one way in which counseling psychologists are productive. Future research should investigate productivity in others areas, including mentorship and clinical service contributions.

Conclusion

In conclusion, what does a highly research-productive counseling psychologist look like? Generally speaking, they are successful early in their careers, receive mentorship while in graduate school, chose research topics that are salient to them and that they are passionate about, effectively manage their time, collaborate well with students and professionals, have a structured approach to writing, work in a supportive research environment, and have a life outside of work. Of course, this brief description does not do justice to the unique ways in which all of the participants became and remained productive, and it is hoped that the detailed descriptions of the typical and general categories from the data have provided readers with a closer look at the lives of these highly productive individuals.

Appendix

Interview Protocol

First, we would like to talk generally about your career development.

- Please describe your career path.

Now we will discuss your current work experience.

- What does a typical day look like for you at work?
- Please talk about the origins and evolution of your research program.
- How would you describe the research atmosphere of your current department and institution?
- How do you balance the multiple demands of your academic position (research, teaching, mentorship)?
Thank you. We now want to ask you a few questions about how you have maintained productivity.

- What do you believe has contributed to your sustained productivity in your career?
- Talk about how you balance your professional and personal parts of your life.

Finally, we wanted to close with some more specific questions about your work productivity.

- Please talk about the personal qualities or traits that have contributed to your productivity.
- How do you manage your time when it comes to your research?
- What impact, if any, do you see your work having on others in the field and/or society?
- What tips would you give new researchers in terms of being productive?

Thank you. Before we finish the interview:

- Is there anything you’d like to say about research productivity that I didn’t ask you?

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