

Backgrounds of, and Factors Affecting, Highly Productive Leisure Researchers

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Abstract

This study sought to better understand the factors that facilitate and constrain highly prolific leisure researchers' productivity. Results indicated these scholars were: (a) largely middle-aged male professors; (b) intrinsically motivated, perseverant, self-disciplined, and committed; (c) at universities where research was expected and graduate student mentorship was possible; (d) in supportive familial relationships, able to access research monies, and "in the loop" when it came to opportunities; and (e) time-deficient in terms of their own leisure but of the opinion that leisure often acted as a creative conduit that enhanced their research productivity. Findings are discussed in terms of what they may mean for early-career academics as well as for the broader leisure studies field.

Keywords: *Constraint, creativity, leisure, productivity, research, striving*

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This article is based on an abstract presented at the 2011 Canadian Congress on Leisure Research. The authors would like to thank Professor Emeritus Edgar L. Jackson, whose curiosity about this topic was contagious; the leisure scholars who participated in our study, whose willingness to do so was heartening; and the editor, associate editor, and two reviewers, whose comments and suggestions were fair, thorough, and thoughtful.

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Ranking universities and university programs has become increasingly common. Internationally, there are the QS World University Rankings, Academic Ranking of World Universities, and Times Higher Education World University Rankings. Nationally, grading schemes have been implemented in Australia (i.e., Research Quantum), the United Kingdom (i.e., Research Assessment Exercise), and elsewhere (Barker, 2007; Geuna & Martin, 2003). Within our own broad field, Thomas and Reeve (2006) ranked American kinesiology and physical education programs; Severt, Teson, Bottorff, and Carpenter (2009) ranked tourism and hospitality programs globally; and Jackson (2004) and Walker and Fenton (2011) ranked U.S. and Canadian leisure studies programs.

Although rankings are calculated using a variety of measures, research productivity is almost always a core metric. In terms of leisure studies, for example, Jackson (2004) reported the results of a comprehensive analysis of all of the research articles published in six major leisure journals, and all of the abstracts published in 14 leisure conference proceedings, during the 1990's. Among his findings were that the top 10 North American universities were responsible for 38.8% of all article and abstract authorships. In a follow-up to and extension of Jackson's work, Walker and Fenton (2011) found that between 2000 and 2008, while the number of North American universities authoring leisure articles and abstracts increased 15.5%, the Top 10 universities accounted for 46.2% of all authorships.

Walker and Fenton (2011) also recommended that "because an institution's research productivity is ultimately dependent upon its faculty members' research productivity, future research should examine the factors that facilitate and constrain the most prolific leisure scholars" (p. 488). The benefits of such an investigation have been outlined elsewhere; with, for example, Mayrath (2008) holding that by "modeling one's writing after experts in the field, beginning scholars can utilize a template or style that has already been proven successful" (p. 41). Research on scientific creativity also suggests that "in general, the periods during the course of a scientist's career in which the most total output is produced tend to be those periods in which the most high-impact work appears" (Simonton, 2003, p. 477). On the other hand, there may be costs associated with increased research productivity depending on how and why it occurs. For instance, if it is at the expense of personal goals (e.g., work-life balance) or other institutional objectives (e.g., teaching, service), if it is seen not as being facilitated by external funding but rather as a by-product thereof, or if it is driven by other extrinsic factors such as the pursuit of prestige within the academic hierarchy (i.e., "striving"; O'Meara, 2007), then faculty members and the scholarly communities they compose may be in harm's way.

Based on the above the purpose of this study is fivefold; to better understand (a) the sociodemographic and academic backgrounds of highly productive leisure researchers; (b) the personal, institutional, and other factors that facilitate their research productivity; (c) the factors that constrain their research productivity; (d) the effects of leisure on their research productivity; and (e) what this may mean for early-career academics interested in improving their own research productivity as well as for the leisure studies field more broadly. To accomplish this, we first outline previous research in other areas that has examined the socio-demographic and academic variables that facilitate researcher publication output. We then describe a theoretical framework that posits that individual, institutional, and other factors influence research productivity (i.e., Bland, Center, Finstad, Risbey, & Staples, 2005). In addition, we expand on this framework by exploring the potential contribution of two leisure behavior concepts: the role of constraints to research productivity and the role of leisure participation in research productivity.

Literature Review

The literature on prolific researchers spans many scientific disciplines (e.g., medicine, management, education, psychology, the natural sciences) and utilizes numerous productivity metrics, including self-reported articles (e.g., Sax, Hagedorn, Arredondo, & Dicrisi Iii, 2002; Stack, 2004; White, James, Burke, & Allen, 2012), internal rankings of individual researchers (e.g., Kiewra & Creswell, 2000), and counting article authorships in discipline specific journals (e.g., Mayrath, 2008). This research lays a foundation for the current study by outlining general research productivity factors, which we then interpret in terms of leisure specific insights. The following is a review of this broader literature, specifically the sociodemographic, academic, personal, institutional, and others factors that have been found to affect research output.

Sociodemographic Factors

Sociodemographic factors such as age, sex, and dependent children have been studied as independent variables. For example, Bland's et al. (2005) study of medical faculty did not find age to be predictive of productivity. Additionally, Stack (2004) found that family related factors such as marital status and dependent children had little effect on research output for those in the social sciences. Sex, however, both alone and in combination with marital status and dependent children, may be a factor. For example, in a study of 13 highly prolific educational psychologists only three participants were women (Mayrath, 2008). Similarly, a Canada-wide study found that men were responsible for 81% of all authorships (Ito & Brotheridge, 2007). The overrepresentation of male authors in academe is a fairly common phenomena (Creswell, 1985; Fox & Mohapatra, 2007). Though Sax's et al. (2002) U.S.-wide survey revealed a shrinking gender gap from the early 1970s to the late 1990s, it is poignant to note that this gap shrunk across all categories *except* for those faculty members who were most productive. Sax and associates suggested that women researchers with children often maintained high levels of productivity by sacrificing their leisure time and focusing on their families and careers. Joy (2006) also speculated about the latter, although he noted that other factors might also account for the significant, albeit small effect size, sex had in his study.

Academic Factors

Bland et al. (2005) found two academic factors, rank and appointment type (i.e., tenured versus nontenured), to be predictive of research productivity. Sax et al. (2002) concurred; however, these results seem intuitive when one remembers that productivity measured by publication metrics is a key factor affecting tenure and promotion decisions. Consequently, other researchers have instead focused on "career age" (i.e., number of years post-PhD). Joy (2006) found this factor had little impact, although interaction effects (e.g., those who are more advanced in their careers may take on more administrative work at the expense of their research programs; Link, Swann, & Bozeman, 2008) mean variability across career age may exist (Tien & Blackburn, 1996). In fact, Simonton (1997) found that productivity actually peaked at the career age of 22.

Another factor that can affect research productivity is "academic inbreeding"—defined as first being hired and then continuing your career at the same university where you received your doctoral degree (Berelson, 1960). A Mexican study (Horta, Veloso, & Grediaga, 2010) found, for instance, that inbred faculty members generated on average 15% fewer articles. One reason for this lower level of productivity is that inbred academics often favor information exchange within their own institution at the expense of external linkages. Furthermore, Horta et al. held that because academic inbreeding can become self-perpetuating, a department as a whole may "become less open to acquiring new knowledge or different methodologies or frameworks" (p. 426).

Personal, Institutional, and Other Factors That Facilitate Research Productivity

Personal factors. Previous research has identified many factors that positively influence productivity. In regard to individual characteristics, the most often cited of these are time management skills (Crase, 1993; Fox, 1983; Kiewra & Creswell, 2000; Mayrath, 2008; Ransdell, Dinger, Beske, & Cooke, 2001), a strong work ethic (Creswell, 1985; Fox, 1983), and having an internal drive (Bland et al., 2005; Creswell, 1985; Fox, 1983; Ransdell et al., 2001). For example, Bland's et al. survey of 615 medical faculty at the University of Minnesota revealed that the most prolific researchers consistently scored five out of five on intrinsic motivation. In other words, they stated, the researchers in their study "were *very* driven to conduct research" (p. 232). What exactly drives these prolific researchers varies, but in some cases "research is [viewed as a] kind of game, a puzzle-solving operation in which the solution of the puzzle is its own reward" (Hagstrom, 1965, p. 16).

In contrast, Perry and Wise (1990) proposed a "public service motivation" where researchers are driven by the desire to "make a difference" and by a sense of duty or responsibility. Given the close ties between leisure research and recreation practice (e.g., Kleiber, Walker, & Mannell, 2011; although see also Henderson, 2011), as well as the growing number of leisure scholars advocating or employing participatory inquiry/participatory action research (Henderson & Walker, in press) this may be an especially important personal factor for those in our study.

Another personal factor that affects research productivity is being well mentored. Mayrath (2008), for instance, stated that: "training under a successful scholar provides a model for a graduate student to emulate" (p. 47). Crane (1965) came to the same conclusion many years earlier, although he felt that successful mentorship was less likely to occur at "minor" than "major" universities. The potential impact of such mentoring should not be underestimated as research has found that early productivity often foretells later productivity (Creswell, 1985; Kemper, 2010).

Finally, although we began this section with a discussion of individual characteristics, Bland et al. (2005) held that these traits "have more or less power in assuring faculty research productivity depending on how research-conducive the faculty member's institution is" (p. 226). Therefore, what follows is a brief overview of institutional factors that impact productivity.

Institutional factors. One of the most common institutional characteristics found in the literature is having access to, and taking advantage of, a large network of other scholars and graduate students with whom to collaborate (Bland et al., 2005; Crase, 1993; Creswell, 1985; Fox & Mohapatra, 2007; Kiewra & Creswell, 2000; Mayrath, 2008; Ransdell et al., 2001). Fox and Mohapatra held that collaborative efforts fare better throughout the publication process because they are revised and checked for errors by multiple people and are usually the result of funded projects. Collaboration can be subdivided into mentoring graduate students and collaborating with colleagues. In terms of the former, mentorship can lead to increased authorships both when the person is a graduate student and after he or she graduates and begins his or her own career (Kiewra & Creswell, 2000). In terms of the latter, Fox and Mohapatra found that while collaboration with colleagues within one's department significantly affected research productivity, collaboration with colleagues outside one's university had an even greater effect.

Two other commonly found institutional characteristics are a positive academic climate and being in a research oriented department (Crase, 1993; Fox & Mohapatra, 2007; White et al., 2012). Though it may seem commonsensical that being in a department that has high research expectations usually results in high researcher productivity, it must be remembered that universities are at least somewhat able to determine the direction and degree they are orientated toward. For instance, university presidents and administrators can reduce teaching loads, recruit

“research stars” shift emphasis from undergraduate to graduate programs, and grant or deny tenure, promotion, and merit pay in an attempt to improve research productivity (O’Meara, 2007). Doing so can result in a university gaining prestige (e.g., because rankings are often skewed toward research) and, increasingly, more and more institutions are now engaged in the pursuit of prestige within the academic hierarchy (O’Meara). If what she calls “academic striving” is indeed widespread, then even the already prolific leisure scholars in our study may report feeling pressured to maintain (or even increase) their research productivity.

Other factors. Besides individual and institutional factors affecting research productivity, a department head’s leadership characteristics are also influential (Bland et al., 2005). This includes a leader not only being supportive of a scholar’s research and having a participative leadership style but also being highly regarded in terms of his or her own research. Other studies indicate that a supportive home life significantly affects research productivity (e.g., Dundar & Lewis, 1998; Ito & Brotheridge, 2007; Kiewra & Creswell, 2000), with these same studies as well as others (e.g., Davis et al., 2012) suggesting external funding also plays an important role.

External funding, however, has become more contentious as the nature of public universities continues to change. Rose and Dustin (2009) have argued, for example, that: “Increasingly, public universities are unable to keep up with the rising costs associated with providing a higher education through tuition and taxes....More than ever, public universities must aggressively seek out external funding to make ends meet” (p. 398). They add that this is especially true for the majority of park, recreation, and leisure studies departments because they are housed in public universities. As a consequence, for those in these departments:

It is no longer sufficient to publish in top-tier journals. A professor’s work now must have external money behind it, preferably adorned with a large overhead. Increasingly, professors feel obliged to cater to outside entities willing to pay for answers to question of interest to them (e.g., the Active Living Research agenda). Professors assume the role of “independent contractors” as they go about the “business” of securing grants and contracts. (p. 399)

If Rose and Dustin are correct, then prolific leisure scholars may report that their perceptions of external funding have shifted from being a facilitative agent to an additional responsibility—and thus perhaps even a restraint on research productivity (cf. Auranen & Nieminen, 2010)—during a time of budget cuts and tuition freezes.

Factors Constraining Research Productivity

There are far fewer studies of constraints to, versus facilitators of, research productivity. One exception was a time allocation study of science and engineering faculty at the top U.S. research universities (Link et al., 2008). According to Link and associates, faculty members worked on average 54.0 hours per week: 19.4 hours conducting research, 16.7 hours teaching, 13.2 hours performing service, and 4.6 hours writing grants. Interestingly, however, while the number of hours worked per week did not vary by years in academia, the number of hours conducting research and writing grants decreased—typically shortly after being tenured and promoted to full professor—while the number of hours performing service increased. Link et al. held that having less time available for research would, as a rule, result in reduced research productivity. This in turn, they suggested, would be detrimental to the university as a whole as research and grant writing are “those activities that, in general are associated with the ethos of a research institution” (p. 373). Based on our belief that most highly productive leisure researchers are likely well advanced in their career paths, it seems probable that our participants will report that lack of time to attend to research is their primary constraint.

Effects of Leisure Participation on Research Productivity

Studies mentioning—much less examining—leisure participation's effects on research productivity are rare. Two broad perspectives can, however, be discerned in the literature: first, they are antagonistic; and second, they are complementary. In terms of the former, Harry and Goldner (1972) found that increments in time spent doing research were more likely to be at the expense of leisure and family time than teaching (see also Hattie & Marsh, 1996). In terms of the latter, though work stress lessens research productivity (Neumann & Finaly-Neumann, 1990), it is also mitigated by leisure (Joudrey & Wallace, 2009); thus, leisure could help maintain high levels of research productivity by acting as a coping strategy (Iwasaki & Mannell, 2000; Sonnentag, 2012).

Leisure could also increase high levels of research productivity by acting as creative conduit. For instance, after interviewing 91 “exceptional individuals”—including chemists, biologists, economists, physicists, psychologists, and social scientists—Csikszentmihalyi (1996) stated that “typical activities that facilitate subconscious creative processes are walking, showering, swimming, driving, gardening, weaving, and carpentry” (p. 354). Henri Poincaré, the French polymath, described just such an occurrence:

I turned my attention to the study of some arithmetical questions apparently without success and without a suspicion of any connection with my preceding researches. Disgusted with my failure, I went to spend a few days at the seaside, and thought of something else. One morning, walking on the bluff, the idea came to me” (quoted in Hadamard, 1945, pp. 13-14).

Noteworthy is that Poincaré's account was cited in a psychological study (Zhong, Dijksterhuis, & Galinsky, 2008) that discovered unconscious thought does indeed “boost” the search for creative solutions, albeit only under certain conditions (e.g., inattention must be directed toward a meaningful goal). Ma's (2009) meta-analysis concurred, with this author specifically noting that quiet, natural environments appeared to be one such factor—which suggests that certain types of outdoor recreation (e.g., self-propelled vs. motorized) may be particularly facilitative of these subconscious creative processes. Thus, to reiterate the complementary perspective, leisure could act either as a coping strategy (Iwasaki & Mannell, 2000), or as a creative conduit (Csikszentmihalyi, 1996), or both, in relation to research productivity. Finally, there are two other potential relationships between leisure participation and research productivity, neither of which have previously been identified in the literature; first, the two are independent; and second, the two are interrelated.

In conclusion, the foundation of our study is built on past work that focused on academic and sociodemographic characteristics, the framework Bland et al. (2002) developed that identified personal, institutional, and other facets, and two factors largely overlooked to date: constraints to, and the role of leisure participation in regard to, research productivity. In the next section we describe the method we used to conduct our study of highly productive leisure researchers.

Method

Sample

Our preliminary sample frame was composed of all of the leisure researchers included in Walker and Fenton's (2011) work. Walker and Fenton, following Jackson's (2004) example, collected data from four American leisure research journals (i.e., *Journal of Leisure Research*, *Jour-*

nal of Park and Recreation Administration, Leisure Sciences, Therapeutic Recreation Journal), two Canadian leisure research journals (i.e., *Leisure/Loisir, Loisir et Société*), and abstracts from the nine NRPA Leisure Research Symposiums and three Canadian Congresses of Leisure Research, from 2000 to 2008 inclusive. All of the authors' names and institutional affiliations for each article were recorded, although those at North American non-educational institutions (e.g., the U.S. Forest Service) and non-North American educational institutions (e.g., Griffith University) were subsequently deleted to permit comparison with Jackson's study. According to Walker and Fenton, a total of 1,461 unique leisure researchers remained after deletion.

We chose to focus on only the refereed articles published in the six leisure journals for a number of reasons, including: (a) articles are generally deemed more important than conference abstracts and research books in academe (Law & Chon, 2007; Park, 1996); (b) articles are a frequent measure of research productivity and, therefore, the extant literature that can be brought to bear on leisure researchers' productivity is much larger (Ito & Brotheridge, 2007); and (c) a strong relationship ($r = .47, p < .001$) has been found between the number of articles published and self-perceptions of research productivity (Ito & Brotheridge). Furthermore, given Walker and Fenton's (2011) recommendation that "future research should examine the factors that facilitate and constrain the most prolific leisure scholars" (p. 488), we focused only on those individuals who had authored and/or co-authored an average of at least one article per year during our study's nine-year time period. Because some of these researchers had retired and we wanted to ensure we would have a reasonable sample size, we extended our sample frame to include those who had authored and/or co-authored eight or more articles during the study period. Our final sample frame, therefore, was composed of 39 leisure researchers.

After ethics approval was obtained an information letter and brief questionnaire were emailed to each potential participant during April and May, 2010. E-mailing allowed for the systematic collection of data on themes developed from Bland's et al. (2002) theoretical framework. This type of approach is appropriate when researchers are asking "what" questions, in this case related to describing personal experience, especially when there is a relatively large sample frame. Non-respondents received follow-up emails approximately three and six weeks thereafter.

Only three of the 39 contacted individuals chose not to participate, a response rate of 92.3%. Noteworthy here is that the 36 highly productive leisure researchers in our study authored between eight and 29 articles over a nine year period ($M = 13.3; SD = 4.9; Mdn = 13.0$). For comparative purposes, a similar study (Hsieh et al., 2004; 2006) of the 25 most productive educational psychologists reported that these scholars authored between 10 and 37 articles over a 12 year period ($M = 14.9; SD = 6.5; Mdn = 12.0$). Thus, we hold that the productivity levels of the top leisure researchers in our study are not unlike those of the top researchers in cognate fields when comparable metrics are used.

Questionnaire

Our questionnaire first informed participants that they were to limit their responses to the refereed leisure articles they had authored and/or co-authored between 2000 and 2008 inclusive. We then asked them to answer two open ended questions based on Bland's et al. (2002) theoretical framework, specifically: (a) "What are the reasons you would give in terms of personal characteristics, skills, strategies, etc." for your productivity?; and (b) "What are the reasons you would give in terms of institutional (e.g., departmental, faculty, and/or university) characteristics, resources, strategies, etc." for your productivity? We requested participants write and rank three reasons for each question. In contrast with Bland and associates, we then asked the more general question "Are there any non-personal or non-institutional reasons you would give to

explain your research productivity (e.g., federal grant funding availability)?” rather than their more specific “What effect did their department head have on their research productivity?” For parsimony’s sake, we requested participants write and rank only two reasons for this open-ended question. Open-ended questions were also used to examine constraints to (i.e., “What is the single biggest factor that limited or constrained your research productivity?”), and the effects of leisure (i.e., “How does your leisure—positively and/or negatively—affect your research productivity?”). Finally, a series of academic (e.g., year PhD received, current rank) and socio-demographic (e.g., sex, year of birth) questions were posed.

Data Analyses

Given the extant literature on research productivity as well as the existence of a theoretical framework (i.e., Bland et al., 2002), we used directed content analysis to code and evaluate our participants’ responses. Directed content analysis uses existing theory and prior research to identify key concepts or variables as initial coding categories, “with data that cannot be coded [being] identified and analyzed later to determine if they represent a new category or subcategory of an existing code” (Hsieh & Shannon, 2005, p. 1282). In our case, we began with 12 personal codes (e.g., commitment, content knowledge, idea development and management, intrinsic motivation, personal discipline, and other), 17 institutional codes (e.g., collaborative environment, pressure, research emphasis, extrinsic rewards, and other) and 10 other research productivity codes (e.g., department head is research oriented, department head supports my research, research funds available, supportive home life, and other) based on our review of the literature. Each author coded participants’ responses and, when they emerged from the data, new coding categories were developed. (E.g., we added a personal code called “responsibility” as participants wrote about feeling dutiful toward clients and society as a whole, which we perceived as being different from “commitment” with its emphasis on the department or university as a whole.) Similarly, we developed 36 codes to examine constraints to research productivity, with these either being based on our review of the literature (e.g., lack of time) or being the antithesis of the personal, institutional, and other codes described above (e.g., a lack of personal discipline). Finally, we used 10 codes to categorize the effect of leisure on research productivity. These codes were based on either extant studies of research productivity (e.g., leisure sacrificed, leisure as a source of creativity) or in leisure studies (e.g., spillover, compensation, release or coping mechanism).

Considerable agreement was found when participants’ responses were coded. For example, of the 427 codes ultimately assigned across the facilitator (i.e., personal, institutional, and other), constraint, and leisure’s effect categories, there was initial agreement on 396 (92.7%). Of the remaining number, 10 (2.3%) codes were changed and 21 (4.9%) new codes were added after coding differences were discussed and consensus was achieved. Congruence was lowest in terms of the relationship between leisure and research productivity (i.e., 40 codes congruent, two codes changed, and seven new codes added; 80.9% agreement) and highest in terms of constraints to research productivity (i.e., 43 codes congruent, no codes changed or added; 100.0% agreement).

Because directed content analysis allows for rank order comparisons (Hsieh & Shannon, 2005), we calculated two different frequency distributions to analyze the personal, institutional, and other characteristics facilitating leisure researchers’ productivity; specifically the: (a) frequency of times a response was mentioned, which reflects researchers mentioning a response in more than one category (and what percentage of total reports this represented); and (b) frequency of times a response was ranked first (and what percentage of total reports this represented). Additionally, the first type of frequency distribution was employed to examine academic

and socio-demographic background attributes as well as constraints to, and effects of leisure on, research productivity. Finally, to complement our frequency results, exemplars of participants' responses were identified and are included as quotations, along with the scholar's sex and career age.

Results and Focused Discussion

In this section we report our results and provide focused discussion in regard to the first of our four stated goals, specifically the: (a) sociodemographic and academic backgrounds of highly productive leisure researchers; (b) personal, institutional, and other factors that facilitate their research productivity; (c) factors that constrain their research productivity; and (d) effects of leisure on their research productivity.

Sociodemographic and Academic Background Attributes

Table 1 reports participants' sociodemographic background attributes. Slightly less than two-thirds (63.9%) of respondents were male, with the 45 to 59 age group being largest (48.4%). Almost all of our participants were married or had partners (91.4%).

Table 2 reports academic background attributes. As shown, two participants were assistant professors (5.6%) while the majority was full professors (58.3%). In addition, although the largest career age cohort was 5 to 15 years (38.8%), the mean was 19.4 years ($SD = 9.8$). This average career age for peak productivity is very similar to that found in Simonton's (1997) study (i.e., 22 years). This result seems to contradict the notions that production typically decreases post-tenure (Sax et al., 2002) and that administrative duties hinder productivity later in one's career (Ito & Brotheridge, 2007). Also noteworthy is that two participants obtained their doctoral degrees from the university where they were now employed. However, as one of these individuals had initially been employed elsewhere, only one of the 36 (2.8%) highly prolific leisure researchers in our study met the accepted definition for academic inbreeding (Berelson, 1960). Although suggestive, further investigation is needed regarding the relationship between "hiring one's own" immediately after graduation and her or his subsequent research productivity.

Table 1
Sociodemographic Background Attributes

Attribute	Frequency (%)
Sex	
Male	23 (63.9)
Female	13 (36.1)
Age	
Under 45	10 (32.3)
45 to 59	15 (48.4)
Over 59	6 (19.4)
Relationship status	
Single	3 (8.6)
Married/Partner	32 (91.4)

Table 2*Academic Background Attributes*

Attribute	Frequency (%)
Current rank	
Assistant Professor	2 (5.6)
Associate Professor	13 (36.1)
Full Professor	21 (58.3)
Current position at the same university where PhD completed	
Yes	2 (5.6)
No	34 (94.4)
Career Age	
5 to 15 years	14 (38.8)
16 to 25 years	10 (27.7)
25 to 35 years	9 (25.0)
35 or more years	3 (8.3)

Personal Factors That Facilitate Research Productivity

Table 3 reports the personal factors that fostered participants' research productivity. Three key facilitative categories were identified: intrinsic motivation; commitment and personal discipline; and other.

Table 3*Personal Characteristics Facilitating Leisure Researchers' Productivity*

Factor	Frequency of Times	Frequency of Times
	Mentioned (%)	Ranked First (%)
Intrinsic motivation	34 (24.6)	17 (38.6)
Commitment	20 (14.5)	6 (13.6)
Perseverance/self-discipline	19 (13.8)	6 (13.6)
Time management	10 (7.2)	4 (9.1)
Other – Being a team player	9 (6.5)	2 (4.5)
Other – Responsibility	8 (5.8)	3 (6.8)
Other – Well-mentored	7 (5.0)	1 (2.3)
Idea development & management	7 (5.0)	0
Other – Non-specific	6 (4.3)	0
Other – Interdisciplinary focus	4 (2.9)	0
Well-defined goal planning	3 (2.2)	2 (4.5)
Other – Success breeds success	3 (2.2)	1 (2.3)
Basic & advanced research skills	3 (2.2)	0
Other – Being open to feedback	3 (2.2)	0
Focused research	2 (1.4)	2 (4.5)
TOTAL	138	44

Note. Frequency of Times Ranked First includes multiple factors ranked equally important and first-place rankings in all three categories (e.g., personal factors, institutional factors, and other).

Intrinsic motivation. Intrinsic motivation was the most frequently mentioned response (24.6%), and was ranked first by the most respondents (38.6%). Participants (with their sex and career age indicated in parentheses) reported, for example, that:

Simply stated, I find conducting research and publishing research/scholarship on leisure to be fun or as we say in leisure, to be intrinsically motivating. (Male, 9 years post-PhD)

Research and writing have always been and continue to be enjoyable and intellectually challenging activities for me. (Male, 33 years post-PhD)

I think what underlines our research productivity is being passionate about what we do. We wouldn't be able to do it at this level if we treated research as "just work"... So, I guess, "passion" is what I would put as the number one reason. (Female, 11 years post-PhD)

Commitment and perseverance/self-discipline. Next were commitment and perseverance/self-discipline, with near equal percentages of total mentions (14.5% vs. 13.8%, respectively), and with both being ranked first by equal percentages of researchers (13.6%). In terms of commitment:

It is very important to contribute to the body of knowledge of the field. Academics are provided the wonderful luxury of time to immerse themselves in the literature and to do research. We have the responsibility to use that time to benefit the field (or the discipline) through our scholarship. (Female, 20 years post-PhD)

My philosophical belief is that a paramount role of an academic—really a duty—is to contribute to the body of knowledge of leisure, so we are in a better position to understand it and its application. (Male, 9 years post-PhD)

I enjoy teaching and academic leadership opportunities but first and foremost I remain committed to and highly value the social science research enterprise including the communication of research findings. (Male, 33 years post-PhD)

In terms of perseverance/self-discipline:

I think the most important thing is perseverance. I struggled with getting anything published early in my career. It was disheartening and frustrating but I felt I had something to say so stuck with it. I kept trying. (Female, 31 years post-PhD)

It helps to have a naturally ingrained tendency toward perseverance (with its accompanying long-term perspective as opposed to fixation with "quick fixes") and a thick skin to deal with the inevitable (usually constructive) criticism that is the hallmark of an academic environment. (Male, 23 years post-PhD)

Make an effort to write regularly on something. The times I write daily, even for 30 minutes, I am very productive. When I don't, I go for months without writing and it becomes very difficult. (Male, 10 years post-PhD)

Other. The next grouping, based on frequency of times mentioned, included being able to set aside time (7.2%), being a team player (6.5%), feeling responsible (5.8%), being well-men-

tored (5.0%), and being able to develop and manage one's ideas (5.0%). An example of each of these five, respectively, follows:

Time is always an issue but it really was more about prioritizing your time. I tried to set aside time every week to write and do research and I was quite religious about that. So, time was always a constraint but I managed to overcome the major issues. I may also have been a bit more productive if I had not been an administrator part of the time. But, I tried to do as little administrating as possible (I was pretty good at delegation) and so that preserved some time. (Female, 31 years post-PhD)

Being flexible in responding to requests for participation in collaborative projects... and willingly undertaking assigned tasks (e.g., willing to take responsibility for writing portions of a manuscript)...in other words, behaving as a "team player". (Female, 10 years post-PhD)

I feel a sense of responsibility to people with disabilities and the field of recreation and leisure to produce research and attempt to positively influence practice. (Male, 26 years post-PhD)

Great mentors at my first institution who they, themselves, were high producers and with whom I could collaborate as well as look to as role models. (Female, 10 years post-PhD)

Developing a system of rotation of having manuscripts at various stages of publication (e.g., 1 in progress, 1 in review, 1 in revision, 1 in press) and maintaining that rotation. (Female, 13 years post-PhD)

Three participants also mentioned that "success breeds success", with one ranking this personal factor first. For example:

I suppose it comes relatively easy for me. I know many people who don't seem to be able put pen to paper. Perhaps they fear failure. I figured out a while ago how to write for peer review and my early efforts were rewarded. I guess success has bred success. (Male, 11 years post-PhD)

Research and writing spawn more research and writing. So the more successful you are, the more successful you become. (Female, 24 years post-PhD)

The nature of the last factor suggests that, if a person has certain abilities (e.g., perseverance/self-discipline) and characteristics (e.g., intrinsic motivation), and masters certain skills (e.g., time management) early in his or her academic career, the research productivity benefits he or she accrues—like interest in a bank account—can actually compound over time.

Summary. Although motivation is an oft-mentioned factor in the literature, our results specifically identify *intrinsic* motivation as the essential characteristic, as indicated by the elements of fun, enjoyment, and passion inherent in the previous quotations. Further to being intrinsically motivated Kiewra and Creswell's (2000) interviewees recommend that young researchers "follow your bliss" and conduct research that may not explore the fad of the day, but remains close to the heart. The felt responsibility of our prolific researchers to contribute to the field or engage in social justice issues illustrates this point quite well.

Possibly the most intriguing of all the factors outlined previously is the perseverance with which these researchers have "stuck to it" in spite of difficulties getting work published, and the

self-discipline with which they set aside time to write. This determination was often described in early productivity research as “innate ability”, as if researchers were born productive or possessed a certain talent lacking in others (Creswell, 1985). Current research is much more forthcoming about the ups and downs of a researcher’s life and the perseverance needed to keep productivity high. This is now typically described in the research productivity literature as “hard work” and “determination” (Fox & Mohapatra, 2007; Ransdell et al., 2001) and in social psychology as self-regulation (Baumeister & Tierney, 2011; and see p. 159 in terms of academe, specifically).

Institutional Factors That Facilitate Research Productivity

Table 4 reports the institutional factors that fostered participants’ research productivity. Three key facilitative categories were identified: research emphasis; mentorship, resources, and collaboration; and culture, rewards, and pressure.

Table 4

Institutional Characteristics Facilitating Leisure Researchers’ Productivity

Factor	Frequency of Times Mentioned (%)	Frequency of Times Ranked First (%)
Research emphasis/expectation	28 (17.9)	17 (30.9)
Able to mentor graduate students	26 (16.7)	6 (10.9)
Resource availability	24 (15.4)	6 (10.9)
Collaborate with department colleagues	15 (9.6)	6 (10.9)
Research culture/norms	12 (7.7)	4 (7.3)
Rewards	12 (7.7)	5 (9.1)
Other – Non-specific	10 (6.4)	4 (7.3)
Colleagues provide mentorship	9 (5.8)	4 (7.3)
Other – Collaborate other colleagues	8 (5.1)	0
Department head supportive	4 (2.6)	2 (3.6)
Pressure	4 (2.6)	1 (1.8)
Department size/expertise	2 (1.3)	0
Recruitment and selection	1 (0.6)	0
Clear coordinating goals	1 (0.6)	0
TOTAL	156	55

Note. Frequency of Times Ranked First includes multiple factors ranked equally important and first-place rankings in all three categories (e.g., personal factors, institutional factors, and other).

Research emphasis/expectation. Being in a department, university, or both that emphasized research in its messaging to faculty and/or being in a position where research was expected for promotion and tenure was the most frequently mentioned response and ranked first by the most respondents (17.9% and 30.9%, respectively). For example:

My department and university place an increasing amount of emphasis on research/scholarship. (Male, 35 years post-PhD)

We constantly receive messages from department chairs, deans, and higher administration that this is a research-intensive environment. While we also take pride in excellent teaching (the great researcher but poor teacher or vice-versa stereotype is largely a

fallacy in my opinion), we make conscious efforts to ensure that research orientation is a critical component of all of our tenure-track faculty hires. (Male, 23 years post-PhD)

Mentorship, resources, and collaboration. Perhaps more revealing was that research emphasis/expectation was ranked first only slightly less often than the three next factors combined (30.9% vs. 32.7%, respectively). An example of each of these three—being able to mentor graduate students, having sufficient resources available, and having the opportunity to collaborate with departmental colleagues—is provided below:

The availability of quality graduate students who push and challenge my thinking and serve as highly motivated and skilled collaborators has provided a highly supportive environment for scholarship. (Male, 33 years post-PhD)

I've had pretty good support from my department and university—seed money, space, support for graduate students, relative low teaching load. (Male, 35 years post-PhD)

Our department is large (we have over 25 faculty members) so it's relatively easy to find people with whom to collaborate. (Male, 11 years post-PhD)

Culture, rewards, and pressure. The two next most reported institutional factors were being in a “culture” where research was normative and rewards outside of tenure and promotion were received for being productive. It is also worth noting that another extrinsic motive—pressure—was mentioned much less frequently (7.7% vs. 2.6%, respectively) and ranked first by far fewer researchers (9.1% vs. 1.8%, respectively). Examples of each of these three factors included:

My home department has a fabulous culture that values scholarship and promotes a non-competitive and cooperative view of the enterprise as a community of like-minded scholars. It is a welcoming environment that encourages graduate students and new faculty members to become part of the culture. (Male, 33 years post-PhD)

My colleagues and the institution generally values refereed publications...we receive rewards for publishing and will not receive those rewards if we fail to publish. (Male, 21 years post-PhD)

[I] feel compelled to publish something while knowing that colleagues have published something. (Male, 6 years post-PhD)

As stated above, a research oriented institution or a norm-centred research climate is the most important institutional factor affecting productivity. In fact, above and beyond the norms of a productive faculty is the compounding effect of a creative, positive, and welcoming department that cultivates a collaborative approach to the research enterprise. As Fox and Mohapatra (2007) noted, this positive climate goes hand in hand with the effects of collaboration and individual work practices to produce a productivity oriented climate. In conjunction with creating a positive faculty atmosphere is mentoring graduate students into this culture. Kiewra and Creswell's (2000) interviewees stated that passionate graduate students contributed to and benefited from this type of culture by supplying new ideas and pushing into new and exciting areas.

Lastly, although having a low teaching load was mentioned, and it has been cited as a factor in some research (e.g., Bland et al., 2005), Ito and Brotheridge (2007) held it was not, in fact, related to productivity, but only *perceptions* of productivity. Instead, they proposed, high producers are able to use the time they *do* have more efficiently.

Other Factors That Facilitate Research Productivity

Table 5 reports the non-personal and non-institutional factors that fostered participants' research productivity. Having sufficient research funds was the most frequently mentioned response (44.2%), and was ranked first by a majority of respondents (56.0%). For example:

Funding from national and state agencies has provided the data necessary to write research articles. (Male, 30 years post-PhD)

Some of my work is influenced by the funding available through various sources. It's much more feasible to do the work with funding. (Female, 12 years post-PhD)

I feel a lot of pressure to obtain funding for my research and graduate students. A natural outcome of obtaining support for research is to publish from it. (Female, 17 years post-PhD)

It should be noted, however, that there were varying degrees of dissent in regard to the "real" value of research funding. For instance:

If I had to choose my dozen "best" papers over the course of my career, fewer than half of them evolved from funded research projects. I recognize that this model can't work for some research questions and some research contexts (or for tenure and promotion criteria at most universities in 2010) but it definitely worked for me. Social scientists can often get great mileage out of some good ideas, creativity, perseverance, and a \$5,000 or smaller seed grant. (Male, 23 years post-PhD)

Frankly, I think funding is too often given as a reason for productivity. Certainly it creates opportunities for research that would not otherwise be possible, but on its own, it does not *explain* productivity (I am discounting here the products that are required as a condition of most granting agencies). Rather, funding typically leads to collaborations with colleagues and working with graduate students, both of which create an environment of intellectual discourse....these are the conditions that lead to productivity. (Male, 22 years post-PhD)

Table 5
Other Characteristics Facilitating Leisure Researchers' Productivity

Factor	Frequency of Times Mentioned (%)	Frequency of Times Ranked First (%)
Research funds	19 (44.2)	14 (56.0)
Communication network	9 (20.9)	4 (16.0)
Supportive home life	8 (18.6)	4 (16.0)
Other – Non-specific	6 (14.0)	3 (12.0)
Other – Research funds unnecessary	1 (2.3)	0
TOTAL	43	25

Note. Frequency of Times Ranked First includes multiple factors ranked equally important and first-place rankings in all three categories (e.g., personal factors, institutional factors, and other).

The two other identifiable factors were having a well-established communications network outside of the faculty and university and having a supportive home life, with both being roughly equal in terms of total number of mentions (20.9% and 18.6%, respectively) and equal in terms of the number of times ranked first (12.0%). In regard to the former, for example:

I have also benefited from developing relationships with organizations and agencies that are interested in the research I do. These partnerships are mutually beneficial. These agencies get information they need and I get data! (Male, 11 years post-PhD)

Knowing people who know others and knowing how to get published is REALLY important I think. So, part of it is establishing relationships that may be useful (or relationships that may just be great friends/colleagues in the future). (Female, 31 years post-PhD)

Really, over and above any of the previous reasons, the number one factor contributing to the number of peer reviewed publications has been collaboration with motivated colleagues who understand and share my research interests and worked with me (either as primary author or secondary, tertiary author) to submit and publish. (Male, 11 years post-PhD)

In regard to a supportive home life:

Being surrounded by loving family members and friends provides me with support that helps in all aspects of my life, including my research productivity. (Male, 26 years)

Support from my partner/spouse—both in practical ways (equal sharing of household and child care responsibilities) and in terms of emotional support (valuing the work I was doing, providing encouragement etc.). (Female, 27 years post-PhD)

I have benefited a great deal from having a spouse who is willing to read my work... I strongly encourage my graduate students to find "writing partners"—i.e., people, like my spouse, who are willing to read critically everything they write. (Male, 11 years post-PhD)

Summary. The ability to find, write, and receive grant funding is a key task for high producers in the sciences (Bland et al., 2005; Stack, 2004), but there is also some support for this phenomena across disciplines (Ito & Brotheridge, 2007). Though most of our researchers supported the need for grants a small number did not view this as a major factor. Given these results, we believe Rose and Dustin's (2009, p. 399, italics added) contention that "a professor's work now *must* have external money behind it" may be somewhat overstated. Additionally, having a supportive home situation is indicative of a well-rounded life, and previous research has indicated that the most productive researchers do indeed have balanced lives (Kiewra & Creswell, 2000). Finally, also important to note and perhaps unique to our field is that developing and maintaining a communications network with organizations outside of the academic sphere (e.g., state park and provincial recreation agencies) was viewed as being valuable.

Factors That Constrain Research Productivity

Table 6 reports the factors that constrained participants' research productivity. Three key constraint categories were identified: lack of time, family obligations, and graduate students.

Table 6
Factors Constraining Research Productivity

Factor	Frequency of Times Mentioned (%)
Lack of time (e.g., teaching and committee obligations)	29 (67.4)
Quality/quantity of graduate students	2 (4.7)
Family obligations	2 (4.7)
Other	10 (23.3)
TOTAL	43

Lack of time. Lack of time represented over two-thirds (67.4%) of all responses. Many participants identified time constraints having to do with teaching and committee work:

Time! Time spent teaching (preparation, updating content, meeting with students, responding to emails, meeting with TAs, marking etc.), time on committee work (Departmental, Faculty, University, Field, etc), time advising graduate students etc. (Female, 7 years post-PhD)

First, as someone strongly committed to teaching in our undergraduate curriculum, I find that the time I spend trying to create (and then evaluate) meaningful learning opportunities both within and outside the classroom is significant. This, for me, results in direct loss of time for writing/research. The second biggest time constraint outside teaching is endless participation on committees, both within our School but also within the Faculty (the downside of being recognized as a “team player” is being asked to participate on lots of committees!). (Female, 10 years post-PhD)

Other participants specifically mentioned administrative responsibilities, which often increase as a person advances in his or her academic career (Link et al., 2008):

As rewarding as my various administrative responsibilities have been, they have certainly curtailed a number of scholarly initiatives and moderated my research productivity. However, I took on these responsibilities fully expecting this reduced activity to be the likely result. I have no regrets. (Male, 33 years post-PhD)

I may also have been a bit more productive if I had not been an administrator part of the time. (Female, 31 years)

And still others identified the “project management” phase of research:

With the growth in my funded research, I’ve largely become a “project manager” coordinating staff and logistics. (Male, 9 years post-PhD)

The catch-22 of balancing project management (external contract work and the management of those projects/final reports) with publications from those projects. In other words, I needed to get those projects to fund my research, but it seemed as if I no sooner finished one grant, another one started and this consumed a lot of time—sometimes to the detriment of publishing from these projects. It is really a balancing act,

finding a way to do projects efficiently and writing from them in an efficient manner. (Male, 11 years post-PhD)

Family obligations. Arguably, family obligations could be included in the previous section, however we viewed these constraints as being distinct from the academe-based time barriers reported therein:

Family life—busy raising young children. (Female, 13 years post-PhD)

I refuse to sacrifice my health and the health/happiness of my family by not allowing time for leisure and therefore, because there are only 24 hours in the day, the time left for research is going to be somewhat more limited. (Female, 10 years post-PhD)

Graduate students. The only other constraint identified by more than one participant concerned the quality, quantity, and demands of graduate students.

I supervise many graduate students' professional papers and theses which often diverts my attention from my own research. (Female, 20 years post-PhD)

Lack of time! I need a larger group of graduate students at the PhD level—I had only MS students thru tenure, so it was a difficult process to train them and then see them leave. (Female, 15 years post-PhD)

Summary. Participants felt strongly that the most important constraint impacting their research productivity was lack of time. The key reasons for this paucity included teaching, committee, and administrative responsibilities. These results are consistent with those of Link et al. (2008), who found in their time allocation study at top U.S. research universities that increased service commitments generally had a detrimental effect on research productivity. Also mentioned by our participants, albeit to a much lesser extent, were family obligations, graduate student and project management demands, and a desire for a balanced life.

Perhaps most concerning, however, was that after detailing the growth in programs, class sizes, and graduate and undergraduate numbers at his/her institution, one participant stated that:

Over the course of my career I've found the constant pressure to grow, grow, grow become almost overwhelming....This is one reason why I'm glad I'm [nearing retirement] instead of 30 and just embarking on an academic career. I should conclude by noting that our tenure track faculty complement is exactly the same size as it was on my arrival. (Male, 23 years post-PhD)

Another participant similarly suggested that increased time demands might be leading to the decomposition of the leisure scholar community. He declared that:

The amount of clerical and administrative work that all faculty are now required to do—and not necessarily directly in support of their own research—is staggering....[N]ever the less, there has not been a corresponding reduction in the expectations of productivity among faculty members. This leads to greater stress, faster burnout, and a more "selfish" attitude towards one's work, all of which are detrimental to scholarship and our field....These factors also contribute to a lesser commitment to support our colleagues and discipline through service. As a result, I fear we might be slowly losing our sense of community. (Male, 22 years post-PhD)

Given the nature of these comments, we will examine more fully what they may mean for the broader leisure studies field in the upcoming Contextual Discussion section.

Effects of Leisure on Research Productivity

Participants' perceptions of the effects of leisure on research productivity are reported in Table 7. As shown, 40.5% of responses indicated the two were complementary, with approximately two-thirds of this percentage oriented toward leisure as a creative conduit versus one-third oriented toward leisure as a coping strategy (Iwasaki & Mannell, 2000).

Table 7

Leisure's Effects on Research Productivity

Effect	Frequency of Times Mentioned (%)
Complementary	
Coping strategy	6 (12.8)
Creative conduit	13 (27.7)
Antagonistic	12 (25.5)
Interrelated	10 (21.3)
Independent	3 (6.4)
Other	3 (6.4)
TOTAL	47

Creativity. In terms of inspiring creativity, for example, three participants stated:

I am a person that tends to think and observe while at leisure, and some good ideas were inspired at leisure, particularly in an outdoor setting. (Male, 6 years post-PhD)

I have many of my best ideas while on a bike or on a run. That is where/when I focus on problems that are particularly vexing. Exercise is key to my writing and research!! (Male, 21 years post-PhD)

Thinking back over my lines of research and "best" papers, a surprising proportion of ideas have germinated while exercising and while travelling—I dare to say well over half. And I say this with a great deal of confidence because I can point specifically to the time and place when the light bulb illuminated in my head. (Male, 22 years post-PhD)

Rest and relaxation. Similarly, in terms providing opportunities for rest, relaxation, and recovery:

On a "daily" (it is rarely daily) basis, I use leisure time to clear my mind and also percolate ideas. (Female, 24 years post-PhD)

Leisure and recreation also afford that critical time and intellectual space to rejuvenate. (Male, 23 years post-PhD)

The two months of leisure I can access in the summer, carry me through the ten months of work. (Male, 17 years post-PhD)

Leisure being antagonistic to research. Support for leisure being antagonistic to, versus interrelated with, research productivity was nearly equal (25.5% vs. 21.3% of responses). In terms of the two being antithetical, for instance, one participant held that:

I think that my research (and other work demands) have negatively affected my leisure as I tend to work very long hours and don't take as much time for leisure as I should. Given everything that I know about the benefits of leisure, it still tends to get pushed to the back burner. (Female, 20 years post-PhD)

But other participants reported taking a more active approach in trying to balance the two, regardless of potential research productivity decreases:

I try to practice what I preach! I believe it would be disingenuous of me to advocate for the importance of leisure for maintaining health and well-being and then to be too busy to leisure. (Female, 10 years post-PhD)

I feel I have a very full leisure life. I set aside time for leisure each day/week. I work hard and play hard. I like to work early in the morning so (even on weekends), I get up early and work and then have lots of time to play. (Female, 31 years post-PhD)

Leisure being interrelated with research. In terms of interrelatedness, leisure time is sometimes used to inform research:

Some of my leisure time is spent reading books that are related to my scholarly interests and—especially—in intellectual discourse with colleagues who are also friends. (Male, 22 years post-PhD)

I have found that my writing and research has been greatly informed by my leisure. It is hard for me to imagine that anybody who studies leisure is not impacted by their own leisure choices. For example, I am interested in understanding diversity among recreation participants involved in the same activity. As a participant in some of these activities, I have first-hand knowledge of orientations, commitments, behavior, and knowledge among social world members. This insider knowledge help me a great deal conceptualizing and writing papers. (Male, 11 years post-PhD)

And, not too surprisingly, leisure concepts—such as flow (Csikszentmihalyi, 1996) and serious leisure (Stebbins, 1992)—were sometimes mentioned in regard to reading and writing research:

For me, research is part of my serious leisure. (Male, 40 years post-PhD)

I find publishing to be a serious leisure pursuit. I also find reading academic writings to be leisure and I often experience flow when writing. (Male, 9 years post-PhD)

I tend to think conceptually and empirically about my experience of leisure while I'm in it, but this is a kind of occupational hazard. It doesn't help the quality of the experience (tends to make flow less likely for one thing). (Male, 38 years post-PhD)

Leisure being independent from research. Finally, a few responses and respondents suggested that leisure and research productivity were independent. In many of these cases, however, participants' subsequent comments seemed to contradict their initial sentiments:

No real effect. My leisure and work overlap quite a bit. (Male, 30 years post-PhD)

No effect. Learning is my leisure. (Male, 30 years post-PhD)

Summary. Though several studies (e.g., Ransdell et al., 2001; Sax et al., 2002) have suggested that researchers maintain high levels of productivity by sacrificing their leisure, this appears to be at least somewhat less true for highly productive leisure researchers. Rather, for those in our study the relationship between leisure and research productivity was multi-faceted; not only with costs (especially less leisure time) but also benefits (especially greater creativity).

Conclusion

The 36 prolific leisure researchers who participated in our study were (a) largely middle-aged, male, full professors who obtained their PhDs on average 19 years earlier and at universities other than where they currently worked; (b) intrinsically motivated, perseverant and self-disciplined, and committed to the field and/or research enterprise; (c) at universities where research was expected, graduate student mentorship was possible, and other resources were available; (d) in supportive relationships, able to access research monies when needed, and “in the loop” when it came to funding and/or publishing opportunities; and (e) time-deficient in terms of their own leisure, but of the opinion that leisure often acted as a creative conduit that enhanced their research productivity. Overall, these results appear largely consistent with those found with highly productive non-leisure researchers. One not too surprising exception to this was that our participants were much more cognizant of the benefits of engaging in leisure. Additionally, two heretofore unreported factors were that a sense of responsibility to improve the circumstances of those they were conducting research with and a perception that success breeds success were also important for some highly productive researchers.

Contextual Discussion

In this section we address our fifth objective by providing a more contextual discussion of what our findings may mean for early-career academics interested in improving their own research productivity as well as for the leisure studies field more broadly.

Mayrath (2008) held that new scholars could benefit by modeling their research after experts in their field; a noteworthy point given others have found that early productivity firmly predicts later productivity (e.g., Creswell, 1985; Kemper, 2010). Thus, based on the highly prolific researchers in our study, we would make the following suggestions for those who are just starting out in leisure studies. First, given that the most reported institutional factor was research emphasis/expectation, it is crucial to determine how important research (vs. teaching and service) is for you and then compare this with how important research (vs. teaching and service) is for the department you want to join. This is not always a straightforward process as, for example, graduate students may have had limited opportunities to teach (and thus discover how much they value teaching) and department heads are often hesitant to give specifics about the research outcomes they expect (e.g., for granting tenure). Regardless, the earlier this comparison occurs and the more honest it is, the better for everyone involved. Second, given that the most reported personal factor was intrinsic motivation, it would seem prudent to learn more about what fosters this motive. According to self-determination theory (Ryan & Deci, 2000) satisfying the needs for autonomy, competence, and interpersonal relatedness has such an effect; and empirical evidence for this was recently demonstrated in a study of Latino faculty members (Lechuga, 2012). Relatedness may, at least partially, also underlie two often reported institutional factors: collaboration with department colleagues and mentoring graduate students. Thus, when you interview for a position you should ensure there are opportunities to work with both groups, and once you have the job (and until you retire!) you should invest heavily in maintaining these relationships. Doing so, of course, will take time; and lack of time was the factor found to most constrain re-

searchers' productivity. Our third suggestion, therefore, is to learn how to budget your time (e.g., by taking a time management workshop, by learning to say no to committee memberships, or by learning how to manage one's ideas—i.e., by simultaneously collecting data for one study, writing up an article from another data set, having an article in review, and having another article in press). Finally, to be able to do their research, some respondents “stole” time from their leisure. More, however, reported that leisure was a creative conduit and a good coping strategy—which suggests that early-career academics should not forget that leisure participation can have a positive effect on their research productivity.

We are also struck by the comments made by two of our participants—potentially the proverbial “canaries in the coal mine”—concerning the ever increasing demands of academe. The first reported that the “constant pressure to grow, grow, grow” made him happy he was not “just embarking on an academic career” but was rather 23 years post-PhD, while the second (male, 22 years post-PhD) stated that the staggering “amount of clerical and administrative work that all faculty are now required to do—and not necessarily directly in support of their own research” had resulted in “greater stress, faster burnout, and a more ‘selfish’ attitude towards one’s work.” These quotations seem consistent with the definition of academic striving (i.e., “the pursuit of prestige within the academic hierarchy”; O’Meara, 2007, p. 122); as well as its often resultant effects on faculty members, including “increased competition in their work-place, pressure to excel in multiple venues simultaneously, a more complex reward system, and a less humane environment for balance of work and family” (O’Meara, p. 162).

Moreover, because research productivity is one of the most often employed metrics used to determine academic prestige—and yet academic striving is not limited to research-intensive universities—we would speculate that there is growing research pressure being placed on leisure scholars in institutions that are not research-intensive or, even more problematic, on leisure scholars in institutions that prescribe themselves to be but do not have the crucial institutional resources (e.g., start-up funding, course reductions, graduate students) available.¹ There is some support for this speculation, as a study (O’Meara & Bloomgarden, 2011) of a self-identified striving liberal arts college found that administrators often engaged in “comparison shopping” with research-intensive universities—but then so too did faculty members. As one of the college’s complicit professors stated:

I think I know what I want. I want to be a researcher. I want to be a teacher but I want to be a researcher. My friends work in these [research-intensive] universities and I don’t want to be any less than them. But then, I always see that if I don’t want to fall behind, I have to work a lot more than them. (p. 55)

Unfortunately, academic striving may also be having a deleterious effect on the scholarly communities to which faculty members belong. As the second participant identified above went on to add, higher levels of stress, burnout, and selfishness “also contribute to a lesser commitment to support our colleagues and discipline through service. As a result, I fear we might be slowly losing our sense of community.” If he is correct we would expect to hear, for example, leisure journal editors and associate editors lament that reviewers are becoming harder to find because they are instead intent on submitting their own articles, often to the very same journals. Whether this is in fact occurring is beyond the scope of the current study, but it raises the possibility that increasing research demands could be hindering the peer review process, hamper-

¹We would like to thank the associate editor and reviewers for alerting us to this potential issue.

ing the organization of workshops and conferences, and lessening people's willingness to sit on boards and committees.

Finally, we are not unaware that the improper interpretation and inappropriate application of our findings could result in increased research pressure being placed on, amongst others, early-career academics, academics at non-research-intensive universities, and academics at research-intensive universities that are resource poor, not only by administrators but by faculty members themselves. We are also cognizant that this outcome could ultimately, and negatively, impact the broader leisure studies community. Thus, caution in this matter is clearly called for.

Limitations and Future Research Directions

Because our sample frame was based on Walker and Fenton's (2011) work, many of the same limitations they identified apply to our study. For example, they noted that there may have been some instances where an author's complete institutional affiliation was not listed and therefore was not counted. Additionally, they stated that a University of Waterloo professor pointed out that, because American leisure scholars were less likely to publish in Canadian journals, inclusion of *Leisure/Loisir* and *Loisir et Société* may have "boosted" Canadian scholars' research productivity tallies. Walker and Fenton acknowledged that because articles published in other North American leisure journals (e.g., *Scholé*) and non-North American leisure journals (e.g., *Annals of Leisure Research*, *Leisure Studies*, *World Leisure Journal*), and leisure articles published in non-leisure journals (e.g., *Journal of Happiness Studies*) were not examined, this could result in a researcher's productivity being underestimated. We also did not differentiate between the least and most productive leisure researchers in our study; and there could be major differences in the factors that facilitate and constrain those who, for example, author one article per year on average and those who author three articles per year on average. Finally, although we stated in our introduction that participants should answer only in terms of 2000 to 2008, some responses suggest a longer term perspective may have been taken (e.g., "success breeds success"). Use of this nine year time period also means that productive scholars who began their career in the mid-2000's may have been overlooked, thus biasing our sample towards more established individuals.

Many of the above limitations could be addressed in future leisure research productivity studies (e.g., by expanding the list of leisure journals; by examining both leisure and non-leisure journals), and therefore such investigations are recommended. Also recommended are two qualitative studies, the first of which would focus on developing a deeper understanding of the factors that affect leisure researchers' productivity generally, the second of which would focus specifically on why there is a sex imbalance amongst the most productive leisure researchers. Additionally, future research should also consider replicating the current study for the 2009 to 2018 period to examine continuity among the most prolific leisure researchers over time, as well as new leisure researchers' productivity. The last may be particularly important as generational differences have been found in the work and leisure values of Baby Boomers, Generation X'ers, and Generation Y'ers (Twenge, Campbell, Hoffman, & Lance, 2010). Assuming that at least some members of the last two cohorts will eventually become leisure scholars: (a) because they are less inclined to put in the long work hours Baby Boomer faculty members do, their research productivity may be lower; (b) because they value their leisure more highly than do Baby Boomer faculty members, and leisure was found in this study to aid and abet creativity, their research productivity may be higher; or (c) a combination of the two. Finally, we recommend a future study examine not only *all* leisure scholars' research requirements, products, and concerns *but also* their teaching and service requirements, outputs, and concerns as well. It is only by doing so that we will develop a truly balanced understanding of the state and future of leisure studies.

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