

5-2019

# Barriers to Public Knowledge Transfer Within the Field of Communication

Vincent White

Clemson University, vtp123@me.com

Follow this and additional works at: [https://tigerprints.clemson.edu/all\\_theses](https://tigerprints.clemson.edu/all_theses)

---

## Recommended Citation

White, Vincent, "Barriers to Public Knowledge Transfer Within the Field of Communication" (2019). *All Theses*. 3059.  
[https://tigerprints.clemson.edu/all\\_theses/3059](https://tigerprints.clemson.edu/all_theses/3059)

This Thesis is brought to you for free and open access by the Theses at TigerPrints. It has been accepted for inclusion in All Theses by an authorized administrator of TigerPrints. For more information, please contact [kokeefe@clemson.edu](mailto:kokeefe@clemson.edu).

BARRIERS TO PUBLIC KNOWLEDGE TRANSFER WITHIN  
THE FIELD OF COMMUNICATION

---

A Thesis  
Presented to  
the Graduate School of  
Clemson University

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
Communication, Technology, and Society

---

by  
Vincent White  
May 2019

---

Accepted by:  
Dr. Darren Linvill, Committee Chair  
Dr. Meghnaa Tallapragada  
Dr. Andrew Pyle

## ABSTRACT

Scholars have debated whether communication research is producing an impact on communication practices and outcomes. With the communication discipline being uniquely positioned to be both relevant and applicable to public audiences, the relevance and applicability of the discipline are futile if the final resting place of communication scholarship is academic journals. A fundamental element of producing significant research that addresses society's biggest problems is communicating with public audiences. The purpose of this research was to understand any challenges involved in the public knowledge transfer (KT) of research by communication faculty to public audiences. Identifying participants through Criterion Sampling, this research conducted 17 in-depth interviews with communication tenured (n=10) and tenure-track (n=7) faculty. Participant responses revealed six prospective barriers to KT. These barriers fell into either internal (Career Agenda, Self-Efficacy, Assumption of Public Appeal) or external (Academic Structure, Lack of Institutional Support, Research Funding Bodies) categories. The implications of these findings to the public, administrators, and faculty are discussed.

*Keywords:* knowledge transfer, engagement, public audiences, communication faculty

## DEDICATION

I want to dedicate this thesis to my wife Jamie who has always been a constant source of support and encouragement during this experience. Your patience alone is worth this dedication, and I owe the success of my last two years to you. I love you and am excited for what the Lord has in store for you, Aaron and me.

## ACKNOWLEDGMENTS

I would like to first acknowledge and thank my cohort for supporting me over the last two years. Your collective guidance and counsel have made this moment possible. My family and I cannot thank you enough.

Dr. Pyle, you've always been a voice of reason for me. I want to thank you for all of your help, guidance, advice, and counsel over these last two years. Whether it was a specific piece of information I was looking for or just confirmation that decision I made was the right one, you were there. Thank you.

Dr. Tallapragada, to say that you had one of the most significant impacts on my graduate education is an understatement. You are one of the most genuine, hard-working, and committed people I know, and have been a constant source of knowledge for me. You and the rest of the committee have inspired me to continue working hard and to see where this path leads me.

Dr. Linvill, I have appreciated your 'down-to-earth' approach to mentorship over these last two year. You have been the voice of practicality for me during this experience, even when it was difficult to hear. However, your open and honest approach has helped more than you know, and my family and I cannot thank you enough.

## TABLE OF CONTENTS

|   | Page |
|---|------|
| TITLE PAGE .....                          | i    |
| ABSTRACT .....                            | ii   |
| DEDICATION .....                          | iii  |
| ACKNOWLEDGMENTS .....                     | iv   |
| LIST OF TABLES .....                      | vii  |
| CHAPTER                                   |      |
| I.    INTRODUCTION .....                  | 1    |
| II.   LITERATURE REVIEW .....             | 3    |
| Knowledge Transfer in Communication.....  | 3    |
| Alternative Models of Engagement .....    | 5    |
| Promotional Metrics.....                  | 7    |
| Bracketing.....                           | 8    |
| III.  METHOD .....                        | 10   |
| Participant Eligibility .....             | 10   |
| IV.  RESULTS AND ANALYSIS.....            | 14   |
| Integrated Model of Behavior Change.....  | 14   |
| Internal Factors .....                    | 15   |
| External Factors .....                    | 20   |
| V.   DISCUSSION .....                     | 29   |
| Internal Barriers .....                   | 29   |
| External Barriers .....                   | 30   |
| VI.  LIMITATIONS AND FUTURE RESEARCH..... | 34   |
| VII. CONCLUSION.....                      | 36   |
| Implications for the Public.....          | 36   |
| Implications for Administrators.....      | 36   |

Table of Contents (Continued)

|                                | Page |
|--------------------------------|------|
| Implications for Faculty ..... | 37   |
| APPENDIX .....                 | 46   |
| REFERENCES .....               | 39   |

## LIST OF TABLES

| Table |                                      | Page |
|-------|--------------------------------------|------|
| 1     | Participant Demographics.....        | 10   |
| 2     | Participant Indicated Barriers ..... | 15   |

## CHAPTER ONE

### INTRODUCTION

Considered as an academic “buzzword” the public engagement of research acts as a vital component of society and its progression over time (Hartelius & Cherwitz, 2016, p. 453). The term engagement can be problematic to define depending on the goal and scope of the research. Scholars have discussed this relationship of action in their definitions, for example; Ankrah, Burgess, Grimshaw, and Shaw (2013), suggest that engagement is a “knowledge-related collaboration by academic researchers with non-academic organizations” (p. 50), Lewis, Hamel, and Richardson (2001) argue that engagement is the involvement and dialog between the community and researchers, Men and Tsai (2015) believe that engagement is the interactions of an “organization and those individuals and groups that are impacted by, or influence, the organization” (p. 396), Dermentzi and Papagiannidis (2018) see research being a “two-way process involving interaction and listening, with the goal of generating mutual benefit” (p. 192). Kim and Krishna (2018) however, take a different approach by suggesting engagement is:

An affective-motivational mediator between citizens’ trust and satisfaction and their supportive behaviors for an organization. (p. 217)

As an alternate to ‘engagement,’ the term *Knowledge Transfer* (KT) will be used for the remainder of this research. Jacobson (2007) broadly defines KT as, “As an ongoing relationship characterized by exchanges between producers and users” (p, 118). The rationale for using KT is because of its equal emphasis on action on the part of scholars to transfer knowledge over solely emphasizing the public’s application of that knowledge.

Scholars have debated whether or not communication research has had any tangible effect on public audiences. Timmerman (2009) opened a joint forum entitled, ‘Has communication research made a difference?’ published in the journals *Communication*

*Monographs* and the *Journal of Applied Communication Research* putting forth the question to the field. In this forum, Timmerman (2009) defines ‘making a difference’ as “positively affecting the lives of others through social institutions, by means of public policy, and addressing social problems” (p. 13). The forum came to no general consensus on the central question and the contributors did not state the ways in which scholars might ‘make a difference,’ nor any challenges involved in making such a difference. Thus, this research will explore the challenges associated with KT of research by communication faculty to public audiences. The following research question (RQ) will guide this thesis:

**RQ:** What are the perceived obstacles of public knowledge transfer among communication faculty?

## CHAPTER TWO

### LITERATURE REVIEW

In recent decades, the scientific community has emphasized the need and importance of incorporating scientific culture, and its knowledge into the prevailing culture (Bryant, 2003). The term *Science communication* (SC) “aims to enhance public scientific awareness, understanding, literacy, and culture” (Burns, O’Connor, & Stocklmayer, 2003, p. 198). This concept of SC is predominantly prevalent in the life sciences (Dudo & Besley, 2016; Hilgartner, 1990; Scheufele, 2014). However, there are some (Sherry, 2010; Southwell & Torres, 2006) who argue that the same energy and vigor the physical sciences are demonstrating toward orienting to the public, are missing in the social sciences.

#### **Knowledge Transfer in Communication**

Communication, as a field, is less effective at engaging the public with the level of zeal and enthusiasm as other disciplines have. KT in the field of communication is mostly intermittent and localized to the scholar. However, The National Communication Association (NCA), the field of communication’s professional association, publishes digital content entitled “Communication Currents” which NCA describes as:

Working from recently published NCA journal articles and emerging research and perspectives, Communication Currents explains scholarly information in straightforward language geared for broad audiences, including communication experts working with laypeople, instructors and students, the press, and other interested members of the public. (National Communication Association, 2018)

Other examples of communication research being transferred to the mainstream come in the form of blogs, where mainly interpersonal communication scholars translate their research. For example; *Why Parents Fear 'The Talk' and What Kids Want Out of It* (Auteri, 2018), *How Long*

*it Takes to Make Friends, According to a New Study* (Belle, 2018), *Micro-Cheating Could Be Ruining Your Relationship, and Here's What to Do About It* (Ducharme, 2018). Some communication scholars elect to engage in KT activities through podcasts. For example, The Peabody Award winning podcast "Uncivil" (2018), that examines untold stories of civil war America, co-hosted and co-produced by a Rutgers University, communication professor. Additionally, "Sports Nerds," a podcast that expounds on the overlooked ways in which sports influences lives, hosted by critical communication scholars specializing in rhetoric and argumentation (Sports Nerds, 2018). Similarly, KT is evident in the work of Yale Law School professor, Dan Kahan's Cultural Cognition Project. The multidisciplinary Cultural Cognition Project states that it is a "group of scholars interested in studying how cultural values shape public risk perceptions and related policy beliefs" (Cultural Cognition Project). Additionally, the blog-based website, The Conversation, prides itself as being a platform that, "offers informed commentary and debate on the issues affecting our world" done through, "In-depth analysis, research, news and ideas from leading academics and researchers" (The Conversation).

Too often, however, the majority of 'engagement' from the discipline comes in the form of activism or social justice research. Scholars in the discipline frequent methods of engagement such as communication intervention into discourses, loosely defined as using communicative resources to "actively participate in a conscious manner to do something about something... interrupting the flow that would happen if we did not consciously act to reconstruct the discourse in more just ways" (Dempsey et al., 2011, p. 264). As approaches like these may share similar mechanics (interacting with lay publics), they fail to take into consideration the cultural and political beliefs of the public at large. Social justice research, as an engagement approach, is potentially problematic as it runs the risk of having large swaths of the lay public differ in

political ideology and ignore any approach by scholars to disseminate knowledge (Rosenbaum, 2017).

### **Alternative Models of Engagement**

The act of engaging public audiences, when operationalized in concert with other factors, is used to connect with and benefit stakeholders. Brossard and Lewenstein (2009) explored how the scientific community engaged with public audiences about the advancements, and how those advancements may affect the public understanding of science. Through what Brossard and Lewenstein (2009) indicate as “real-world outreach activities,” they propose four models of engagement (1) Deficit Model, (2) Contextual Model, (3) Lay Expertise Model, and (4) Public Engagement Model (p. 12).

#### **Deficit Model**

There is mild skepticism among lay publics toward science which may be attributed to a lack of scientific understanding (Sturgis & Allum, 2004). How scholars interact with public audiences may explain this skepticism. The engagement of academic research to lay publics has long modeled itself after the *deficit model*, that is, assuming that there is a deficit of knowledge of a passive and naive public and that it can only to be filled by "well-informed educators"(Hagger-Johnson, Hegarty, Barker, & Richards, 2013, p. 665). Such models that emphasize a unidirectional approach to research dissemination assume that public audiences are devoid of scientific literacy (Hagger-Johnson et al., 2017). However, critiques of the deficit model suggest that it is a “false premise” to believe that lay publics suffer from deficits in the understanding of science (Nisbet & Scheufele, 2009, p. 1767). Furthermore, the structure of this model is driven by scholars that fail to consider that research messaging and dissemination is

only effective if lay publics find the information relevant or applicable, which often is not the case of the information transferred through this model (Nisbet & Scheufele, 2009).

### **Contextual Model**

Operating on the basis that people are not “empty containers” for the deposit of information, *The Contextual Model* acknowledges that individuals construct social understandings which contextualize processed information (Brossard & Lewenstein 2009, p. 13). The context of presented information shapes how an individual may respond to and is affected by different representations of that information. This model takes into account psychological aspects that may affect the context of a particular message (Brossard & Lewenstein 2009). The Contextual Model is ideal when practitioners connect messages to specific audiences so that they might become familiar with the presented information.

### **Lay Expertise Model**

Rarely are the skills or knowledge level of the public considered when scholars conduct research. The same is true when those in Academy disseminate knowledge to public audiences. Brossard and Lewenstein (2009) indicate that the *Lay Expertise Model* suggests that scholar’s misuse of academic information, failing to see benefits of appreciating a community’s local knowledge. Through this model, researchers recognize held the expertise of lay publics. However, some scholars critique this model indicating that practical approaches, through local knowledge, are not distinct, while others argue the validity of lay-expertise.

### **Public Engagement Model**

This model emphasizes certain activities explicitly designed to heighten public involvement of academic endeavors. Brossard and Lewenstein (2009) indicate activities such as conferences, technology assessments, demonstrations, and other techniques as being ways in

which to empower the public to “democratize” science (p. 16). As an approach to the public understanding of science, the Public Engagement Model is often considered a “dialog” model as the public’s input on scientific issues are viewed as important in this model (Brossard & Lewenstein, 2010; Miller, 2001, p. 117). In summarizing these engagement approaches, Brossard and Lewenstein (2009) offer, “two of the models [Deficit and Contextual Models] thrive at delivering information to the general public or to a specific group while the other two [Lay Expertise and Public Engagement Models] are about actively engaging [the public] with science” (Brossard & Lewenstein, 2010, p. 16).

### **Promotional Metrics**

The tenure process requires researchers to generate publications within relatively short time frames which consume a considerable amount of time and energy (Ducharme, 2018). Furthermore, research in faculty perceptions of the tenure process demonstrates that full-time faculty faces increasing workloads resulting in warnings about the changing nature of academic work. Becher and Trowler (2001) found that extra tasks and added faculty responsibilities, instituted at the departmental level, produced less than favorable working conditions and limited faculty research autonomy, often in the pursuit of tenure. The notion of ‘impact’ affords academic departments leverage in considering faculty for tenure and promotion (Cheney, 2007). Publications in ‘high-impact’ journals become an incentive that departments and universities can use to encourage research production over other elements of impact. It is suggested that tenure acts as an incentivizing practice (e. g., promotion and academic security), to encourage scholars to establish good research habits leading to productive academic careers (Faria & Montero, 2008). Tenure is often related to salary increases, protecting from external forces (i. e., institutional retribution or dismissal for controversial research), or decrease in responsibilities

(Brown, 1997). As an unintended consequence, however, the tenure process allows institutions to create guidelines that determine how much emphasis put on research production over teaching and public engagement (Love & Kotchen, 2010).

The challenge of assessing the impacts of social science research is that often, results are less tangible and measurable (Olmos-Peñuela, Castro-Martínez, & D'Este, 2014). Academia often indicates the type of 'impact' new faculty should strive for in departmental tenure and promotions guidelines. These promotional metrics, act as a means by which departments, colleges, and universities assess tenure-track faculty for promotion (for tenure overview, see Youn & Price, 2009) through specific criterion (Coggburn & Neely, 2015). There is a belief that faculty must continuously publish research in order to maintain departmental standards or face the likelihood of being replaced by a more 'productive' scholar. A 'publish or perish' mentality became the byproduct, as departments place greater emphasis on research publication and service work rather than publicly oriented endeavors (i.e., documentaries, op-eds, public talks) (Coggburn & Neely, 2015, p. 200; Youn & Price, 2009).

### **Bracketing**

Creswell and Miller (2000) suggest *bracketing* in research allows readers to understand the position of the researcher than to suspend those biases throughout the study. Tufford and Newman (2012) define the notion of bracketing as:

The scientific process in which a researcher suspends or holds in abeyance his or her presuppositions, biases, assumptions, theories, or previous experiences to see and describe the phenomenon. (p. 83)

It is important to acknowledge my presuppositions regarding this thesis and lay bare my bias, detailing it for the reader. As a graduate student in this discipline, I disagree with the scope of a majority of current communication scholarship. Much of the research in this field becomes most

valuable, in my opinion, when communication is operationalized as a transaction through which relationships are maintained and used to facilitate desired intentions, rather than symbolic, (although symbolism is necessary to facilitate communication).

I agree with Craig (2018) in that a practical discipline "cultivates a practice by engaging critically and constructively with the normative meta-discourse that constitutes and regulates the practice in society" (p. 291). Our discipline should position itself more toward praxis, where our scholars could attempt to provide unique communicative solutions for the most critical challenges facing our society, which prove beneficial for practitioners (Koschmann, 2010).

## CHAPTER THREE

### METHOD

The purpose of this study is to explore the KT behavior of communication faculty through in-depth interviews of communication faculty. The in-depth interview is positioned to garner the understandings of meanings, emotions, experiences, and relationships, and for this study, faculty perception (Adler & Adler, 1994). The construction of interview instruments began broad, then narrowed in scope over time. Using Perkmann et al.'s. (2013) research as a guide to construction, instruments were adjusted as participant responses began to indicate patterns and themes (see appendix) (Charmaz, 2006). Interviews were conducted via face-to-face, phone conversation, or through online video platforms. All names and other identifying information have been replaced with pseudonyms to protect the anonymity of participants (see Table 1). The length range of interviews were 20-to-50 minutes, depending upon faculty availability and schedule (see table 1). All interviews were conducted via over the phone, in-person, or video conferencing (i. e., Skype).

#### **Participant Eligibility**

Criterion Sampling was used in participant recruitment of this study (Patton, 2002; Sandelowski, 2000). The rationale to employ Criterion Sampling was to ensure the flexibility to target and recruit participants who met the specific criteria of this study. Participation was limited to those who had earned a Ph.D. and were currently employed in a tenure or tenure-track academic position in a department of communication (including communication sciences, studies, arts, or any other department where communication is the majority focus of study) at a U.S. institution. Eligibility was further contingent on these academic positions being within institutions offering at least a four-year degree in communication. The rationale behind this

Table 1 Participant Demographics.

| Participant   | Academic Rank | Length | Institution |
|---------------|---------------|--------|-------------|
| Dr. Goodwin   | Tenure-Track  | 53:23  | Public: R1  |
| Dr. Kameron   | Tenured       | 41:44  | Public: M1  |
| Dr. Farris    | Tenured       | 29:25  | Public: R1  |
| Dr. Barret    | Tenured       | 41:31  | Public: R1  |
| Dr. Campbell  | Tenured       | 42:22  | Private: R1 |
| Dr. Thomas    | Tenure-Track  | 35:23  | Public: M1  |
| Dr. Daniels   | Tenure-Track  | 24:06  | Public: B1  |
| Dr. Leighton  | Tenured       | 38:11  | Private: R1 |
| Dr. Lane      | Tenure-Track  | 49:37  | Private: R1 |
| Dr. Hodges    | Tenured       | 41:01  | Public: R1  |
| Dr. Lawson    | Tenure-Track  | 49:42  | Public: R3  |
| Dr. Smith     | Tenure-Track  | 39:03  | Public: R2  |
| Dr. Franklin  | Tenured       | 28:52  | Public: R1  |
| Dr. Sanderson | Tenure-Track  | 40:49  | Private: R1 |
| Dr. Goldman   | Tenured       | 41:51  | Public: R1  |
| Dr. Peterson  | Tenured       | 46:33  | Public: R1  |
| Dr. Martin    | Tenured       | 37:14  | Private: R1 |

*Note.* Interview lengths are formatted in minutes and seconds.

determination is that a primary focus of community colleges is to prepare students for four-year institutions and the working world (Gill, 2016) and thus faculty may not focus on knowledge transfer compared to those with higher research activity. Seeking first the undergraduate communication advisors of fellow graduate students, then drawing on the network of communication faculty close to this research seeking participant recommendations. The amount of time faculty needed to be employed by a communication department was not established as a set of criteria, thus producing a wide range of departmental faculty durations.

Criterion sampling produced a 42.5% response rate out of those who participated (n=17) from those initially were initially contacted (N=41). Participants represented both public (n=12) and private (n=5) institutions. Participants consisted of both tenured (n=10) and tenure-track (n=7) faculty. Within the tenured academic ranks, participants consisted of associate (n=3), Full Professorships (n=7). Furthermore, participants represented a wide range of communication sub-fields spanning areas such as; Media Studies, Cultural Studies, Organizational, Communication

Ethics, Crisis, Public Relations, Communication and Sport, Interpersonal, Intercultural, Communication Technologies, Gender, Rhetoric, Science Communication, Political Communication, Advertising, and Consumer Culture. Furthermore, the institutions in which participants were represented spanned various Carnegie Classifications of Higher Education. The Carnegie classification is a classifying framework through which institutions are grouped by research productivity, and types of degrees awarded (Carnegie Classifications, 2018). Classified institutions represented were R1 (n=12), Doctoral Universities – very high research activity, R2 (n=1) Doctoral Universities – high research activity, D/PU (n=1) Doctoral-Professional Universities, M1 (n=2) Master's Colleges and Universities, and Baccalaureate Colleges (B1) (n=1) (Carnegie Classifications, 2018).

Participant responses produced over 11 hours of recorded audio and 140 pages of transcripts. Conceptual categories and themes were identified which emerged from responses were then analyzed using Constant Comparative Analysis (CCA), in which responses were coded and compared to others until broader categories surfaced (Glaser & Strauss, 1967). Transcripts were first separated by academic rank then research interests; communication of Science, Health, Environment, and Risk (CommSher) (n=5), Cultural Studies and Rhetoric (n=7), and others that did not fall into these two categories (organization, sports, interpersonal, political communication) (n=5). Responses were cut into strips and color-coded indicating emerging categories. Responses that failed to coalesce around larger categories were eliminated and deemed unsaturated. Saturation occurred when responses continued to repeat, in the same category, academic rank, and research interest. For example, aspects of the tenure structure appeared in tenure and tenure-track responses, and across all research interests, thus considered to research saturation. Once responses reached saturation, they were re-examined, color-coded once more, then combined with overlapping categories. For example, responses concerning

tenure requirements and those concerning the applicability of communication research were combined to form the category "Academic Structure."

## CHAPTER FOUR

### RESULTS AND ANALYSIS

Participant interviews produced insight into the potential barriers of public KT. As participant responses began to reveal prospective barriers to KT, frequently appearing words or phrases were compared to one another until themes began to surface. The comparison of emerging themes was repeated to ensure saturation, that Adler and Adler (1994) suggest when findings consistently appear in the participant's responses. Responses revealed six prospective barriers (see table 2) to KT which coalesced around internal and organizational factors.

#### **Integrated Model of Behavior Change**

Fishbein, Ajzen, Albarracin, and Hornik's (2007) Integrated Model of Behavior Change (IMBC) offers a systematic explanation of understanding the KT behaviors of communication faculty. Fishbein et al. (2007) argue that certain variables could explain variance in behavior and action in any population. Furthermore, they posit that the "intention to perform a behavior follows reasonably (but not necessarily rationally) from specific beliefs that people hold about the behavior" (p. 23). A principal concept of the IMBC is that people are motivated to perform a certain behavior (rational or irrational) that is deemed a "good thing," over those perceived as bad (p. 23). For example, if a black cat crosses one's path while driving, they must immediately change directions out of the belief that if one does not, it will bring bad luck. This example illustrates the reasoning (to avoid hitting a cat in the road) and, irrationality (if luck is something one does not subscribe to - the cat will move out of the way) of behavior performance. The IMBC predicts that people will act on their intentions if the necessary skills are present and environmental factors do not hinder behavioral performance (Fishbein et al., 2007). When respondents indicated they did not perform a widely recommended behavior like KT (see Frey,

2009), but intended to, Fishbein et al. (2007) argue that it is not a motivational challenge but one of ability (i.e., skills) and means (i.e., environmental limitations). The skills and environmental factors that can impede on behavior performance are similar to the indicated barriers to KT. To illustrate, for example, those right out of their doctoral programs may be highly motivated to transfer knowledge to public audiences. However, in the reality of their first tenure-track position, they may find themselves held to a level of academic production that is rewarded by promotional guidelines (i.e., environmental or organizational barriers). Determining one's intention to perform a behavior, Fishbein et al. (2007) indicate comprised of three perceptions: attitude, perceived norms, and the self-efficacy of one's perceived capability to successfully perform a specific behavior. One's 'attitude,' in the IMBC, suggests people evaluate their overall favorability to perform a particular behavior. The social pressure one expects regarding performing the behavior otherwise known as 'perceived norm,' is the totality of injunctive and descriptive normative perceptions. Fishbein et al. (2007) indicate that injunctive norms are the degree to which one's social networks are expected to be supportive of a performed behavior, while descriptive norms are the degree to which members of those networks perform the behavior themselves. Participant responses around KT behavior demonstrated adherence to attitude, perceived norms, and self-efficacy of the model. Furthermore, the IMBC illustrates how participant's KT behavior can be influenced by changes in behavioral skill and intention (internal barriers) and environmental factors (external barriers).

### **Internal Factors**

There is empirical evidence which suggests that internal factors play an essential role in KT behavior (Perkmann et al., 2013). Participants of the present study indicated barriers to KT that coalesced into factors internal to the scholar.

Table 2 Participant Indicated Barriers.

| Internal                    | External  |
|-----------------------------|---|
| Career Agenda               | Academic Structure<br>Access to research<br>Practicality and applicability<br>Incentive<br>Acclimation<br>Perceived Internal Pressure |
| Self-Efficacy               | Lack of Institutional Support   |
| Assumption of Public Appeal | Research Funding Bodies   |

### **Career Agenda**

Participants expressed prioritizing their career agenda, over activities that fell outside of that agenda. Some of these responses began to materialize as barriers to KT. For example, in responding to a follow-up question regarding their research process, Dr. Hodges, a tenured participant at a public R1 institution indicates:

For me, it's in terms of advancing the theory and my sense is, my deep belief is, that there's nothing more practical than a good theory. And so, if I'm able to advance the theory, then a whole bunch of different people are going to be able to utilize that advancement, relative to whatever phenomenon that they're interested in trying to help explain better in some way. So, there's a lot of indirect effects that exist as a result of the work that I do.

This response suggests that, as a personal interest, theory advancement is the most significant aspect of the research process. Additionally, Dr. Daniels expressed:

Well, to be perfectly honest with you, the reason I'm in this job is because I really want to teach...So the goal is to follow the guidelines and do what I gotta do to get tenure.

Dr. Hodges further illustrated that their career agenda acted as a barrier, they noted:

This is probably a generational deal, you know, younger scholars, those that are in these last two generations... it's been more of kind of presented to them that [KT] is part of their work, that they are to speak with journalists, get their stuff in the news, try to impact the general public in that way, I came into the [academic] business at a time where that was not deemed a priority.

Another example of how one's career agenda, influenced by outcome expectations, may act as a barrier to KT is indicated by a response from Dr. Barrett, a tenured participant at a public R1 institution. In observing a prior research interaction, this participant states:

I said, "can you get me access to those people who served that role so we can interview those people and find out what they thought of their role there." And because it was me, and people were willing to vouch for me, not just say, "yeah I know him, but I'll vouch for him, he's not going to twist your words," that's been tremendous.

The expectation of access to research populations, indicated by this response, illustrates how outcome expectations can impact and reinforce a scholar's career agenda toward what may benefit their agenda and away from KT efforts.

### **Self-Efficacy**

Although Self-efficacy was less direct in responses, participants did allude to feelings of lack of experience and comprehension of KT activities, demonstrating the potentiality of self-efficacy being a barrier to KT. To illustrate, when asked why the use of one method of research dissemination over others, Dr. Franklin, a tenured participant from a public R1 institution stated:

I'm really good at writing for academic journals and teaching and doing those types of things and just trying to, like, publish the more popular places or [translate] what I do into more popular language. I've had less experience with that.

To further illustrate the potentiality of self-efficacy being a barrier to KT, Dr. Leighton, a tenured participant at a private, R1 institution responded:

So, I think, overall, social media issues are things I don't understand. I do not understand how people spend time on social media. I'm old enough that my thought process doesn't work that way... Some of this is my own lack of electronic media facility.

When asked about where a majority of the research from the field would fall on a spectrum of applied and basic research, Dr. Goodwin noted:

You're asking a really hard question because it's such a diverse field. Overall most disciplines, at least the social science and humanities disciplines, are going to air towards being one step away from being applied...That is kind of the model in which we have been taught to work and to live. That's the model that gets us hired and promoted and have job security. So, that's probably the model that I say the field actually works in.

Dr. Goodwin expressed self-efficacy concerns, as a prospective barrier to KT, by suggesting they were not indoctrinated in how to participate in transferring activities.

### **The Assumption of Public Appeal**

As a prospective barrier, the assumption of public appeal refers to scholarly perceptions and assumptions of what is appealing to public audiences. Responses illustrated participant assumptions toward topics or research areas that may or may not appeal to public audiences. This was primarily the case if those interests differed from those of the participant. To demonstrate how participants perceived the interest of the public, Dr. Peterson, a tenured participant at a public R1 institution notes:

"I just read a very interesting, long-form piece about glitter over the weekend, it said like "What is Glitter?" The person who picks up and reads "What is Glitter?" is not the same person that picks up the [news]paper and reads it or goes on social media and reads like

about the Eagles game, right? So, they're not the same people, ... you're not going to those things for the same purpose. Which is why I feel like, you know when I'm writing, that's who, I'm thinking about, like who's somebody, who is interested in the world around them.

The participant assumes what is appealing to the public by indicating that those who are interested in the world around them, cannot also check social media for sports highlights. The scholarly speculation of what is appealing to the public could suppress KT efforts, believing their research would not appeal to the public audiences, therefore not attempt to transfer that knowledge.

Participants also assumed the public's appeal to theoretical research. Dr. Kameron, a tenured participant at an M1 institution noted:

And I think people are very interested in practical problems, if not applied research, if that makes sense, right, they're interested in asking questions that aren't necessarily about expanding just the theoretical domain, you know, than developing new technologies or developing new ideas.

Similarly, Dr. Thomas, a tenure-track participant at an M1 institution notes:

But some scholars do think that it's not as interesting for the public. They might think, what's the point of trying to make it accessible because they're not going to find it interesting.”

Furthermore, when asked what obstacles they would associate with KT, Dr. Thomas makes an observation of their colleagues by stating:

I heard this from other scholars when I go to conferences and join my [peers] in conversation... But some scholars do think that it's not as interesting for the public. They

might think, "what's the point of trying to make it accessible because they're not going to find it interesting." That's usually like more for high-level like rhetorical or critical work.

## **External Factors**

### **Academic Structure**

Responses indicated that organizational or departmental factors acted as primary barriers to KT. Participants expressed being heavily impacted by aspects of the Academy's structure (e.g., tenure), among other factors of the academic job market. Many of the participants indicated ways in which the structure of academia complicates their KT efforts. For example, Dr. Leighton expressed:

Most scholars are in [an] academic setting, and most academic settings are complicated and career-related. It has a set of complicated, career-related things having to do with tenure and promotion and so on.

When asked of the obstacles that were perceived as being associated with KT, Dr. Smith expressed:

I have to publish to get tenure. So, there is kind of an element of negotiating what we end up doing with [our] research. So that can be kind of complicated, trying to explain to non-academic partners, like, "oh, I need to be able to use this data in this way and publish it." So what you end up saying but not saying otherwise is "oh, [this partnership], it's not worth my time, as much as I'd love to solve this problem. I don't have that luxury. I need to combine trying to solve the problem with publishing." And so that can be kind of a difficult thing to articulate. You know, I think that publish or perish culture is one unique to academia. And I don't know if a lot of people outside of [academia] even know that's a thing.

One participant noted that the structure of academia is one that scholars enter, often devoid of any confidence and understanding in the process of the academic job market. Dr. Peterson notes:

Yeah, I think I'm able to right now, in a way that I maybe had wanted to. But I didn't have the confidence, I didn't have the background, I didn't have the years of going through and doing this, the decades of being in this job that I have now. And by virtue of all that stuff, I'm able to do it...I will say that it is partially confidence in as well. Because I do think that on the tenure track, and as a graduate student, you are trying to prove yourself, and you're not as secure in your identity or your ideas. And one of the things that happens when you get tenure is that I mean, the cheap way of saying it is that you don't have to cite people much, but what that really means is that you have a mantle on which you have developed your scholarly understanding, you have a much deeper sense of the field of the of the arguments, and you also have a certain sense of legitimacy that you just don't have as a younger scholar.

Dr. Peterson illustrates how the impacts of the academic structure can affect one's ability to feel confident or even have the legitimacy to participate in KT activities until achieving a certain level of supremacy.

### *Access to Research*

Other structural elements of academia indicated were the physical and financial access to generated knowledge. Kaufman (2011) argues that academic libraries that restrict public access are often based on limited recourses (i.e., budgets and staffing) and contractual obligations with academic publishers. Dr. Farris, a tenured participant at a public, R1 institution asserts:

People can't even access [academic journals] unless they have resources. Oh yea, that goes along with all that I'm saying, just giving better open access to things, and I understand that it's the nature of the beast... so it's a catch 22.

Physical access to knowledge is but one element which restricts public audiences. Dr. Kameron suggests that the ability to cognitively access abstract concepts may act as a barrier in attempting to transfer knowledge:

But I don't think that the study of communication, to be valuable, actually has to be that abstract, or even necessarily that complex. And I'm just worried that we have a discipline that is split with far too much into jargon, and minutiae, into you know, creativity for its own thing.

### ***Practicality and Applicability***

Participant responses indicated aspects of both the applicability and practicality of the research of their colleagues as being a prospective barrier to KT. To illustrate, Dr. Barrett stated, "When you're talking with the public, you can come across as [someone] who is arguing for 'pie in the sky' things that don't seem realistic." Dr. Barrett suggests that public audiences may perceive research from some scholars as being unrealistic and out of touch, thus affecting the trust, willingness, and interest of the public in receiving any information from those in academia. Further illustrating the prospective nature of the practicality and applicability of research being a barrier to KT, when asked about the perceived KT barriers of their colleagues, Dr. Kameron noted:

One I think in communication in particular, is the practical value [of the research]. The discipline has gotten highly, highly theoretical and abstract...When I read a lot of research, I think, part of that routine and habit, is you know, to help people both, you know, have that internal feeling of value, right, like that, 'I enjoy research,' that kind of notion of the scholar working on the small problem in the library alone, that sort of image, but they really value what they're doing, even though it's so particular, you know, compared to the outside world. I think the way you sustain that is, to then also see the

value of that when it's done. When, there's a research artifact or artifacts, and when those things seem to have value out in the world.

Participants seemed to internalize their research as to what was practical or applicable to them. Doing so introduces the potentiality of becoming a barrier to KT by not considering the practicality and applicability of the research from the point-of-view of public audiences.

### *Incentive*

Participants demonstrated extrinsic motivation as they internalized the need to take specific academic actions (e.g., article publication and service work), out of obligation to the requirements for success in their career. To illustrate, when asked why this participant did not engage in specific KT activities, Dr. Thomas, stated:

“Yeah, you know, I'm going to be honest, it's because it's not a part of my tenure package. And, [it's like] I work for corporate right. I'm working for my promotion.

Illustrating how incentive impacts scholar actions, Dr. Sanderson demonstrated a hierarchy of needs and values:

I was a reporter for a magazine for a couple of years. And when I left the day to day hustle of that, and went back and got my Ph.D., I basically had to let it just put that self in a box in like in my closet. Like, "I can't do this right now. There's no reward for this, there's no incentive for me to continue to do this. But like, I always knew 'that self' in the closet was very meaningful and useful.

Furthermore, when asked why you don't put your research on social media, Dr. Goodwin indicated, “It's hard to get rewarded for it right now.” Furthermore, Dr. Sanderson expressed:

The most frustrating part of the process is where, after I format what I think is interesting, what I want to write about for a scholarly journal, I mean, it's fine, or whatever, like, you have to do it, because it's the game that I have to play in order to keep this job, which I

really love. But you know, it's just, you can't write it as interesting [of a piece] as you wish you could. They're usually constraints on the format, Like the structure, it all makes it kind of boring.”

These responses illustrate how the obligation to career requirements can disincentivize KT efforts. Furthermore, all of the participants who indicated this potential barrier were tenure-track faculty, suggesting this potential barrier adversely affects those pre-tenure.

### *Acclimation*

Participants expressed that entry into and success in the academic job market (as in other professional areas) requires an acclimation period. For example, Dr. Goodwin, in responding to a question of why they do not currently participate in KT efforts, noted:

For the first two to three years of any assistant professor's life, [we're] worried about getting [our] research program running.

Echoing these sentiments, Dr. Lawson, a tenure-track participant at a public Doctoral/Professional institution stated, “Like your first year, the professor's pretty much just trying to figure out how to do it.”

Junior faculty often had to acclimate to the requirements of tenure, traditionally in the areas of teaching, service work (to the institution or discipline), and journal publications (Cogburn & Neely, 2015). This ‘on-the-fly’ adaptation to the frequency these requirements, may itself function as a barrier to KT if the transferring activity falls outside of these requirements.

The acclimation period that junior scholars experience can be critical to the success of their career. Dr. Barrett explained:

The first five or six years [of my career], pre-tenure, I didn't do any book projects, I obviously wasn't on the radar screen for most people to ask as a guest speaker or very

rarely would I do media things like that. I played by the rules. I figured out what the rules were for tenure and promotion and then once you have that, you have a little bit more freedom.

However, this acclimation can act as a barrier due to the time requirements necessary for the adjustment. For example, Dr. Farris stated:

"I mean, [academics are] made to focus on publishing and academic journals, but especially when going up for tenure, [it] leaves a little time for anything else, you know, like, do you have time to go and, you know, initiate all these contacts? But it's always been an obligation of mine to get my research out there and not be satisfied with, you know, having one more line on my vita.

### ***Perceived Internal Pressure***

Participants expressed feeling pressure from colleagues across the discipline when their research strayed from the status-quo in the field. In describing their research, Dr. Barrett notes:

I think it's more applied. But here's the catch. Lots of times [other scholars] refer to applied research and thinks it's atheoretical, and it's not.

Dr. Franklin also noted:

If you're going off into some new territory that kind of contradicts with other people are thinking, it's gonna be hard to get published...my thing is, if it's not a useful theory for you, you don't have to use it.

Furthermore, when asked about what they believed acted as a barrier to KT, Dr. Peterson also indicated:

Not being very rigorous, like, there's almost an inverse relationship between, how well you communicate, and how difficult the ideas are you're communicating. Which I have

found to be, you know it's not something I agree with, but I think it's something sort of a myth that persists throughout academia.

According to Cheney (2007), this pressure expressed by participants may stem from aspects of fracturing in the field of Communication as a consequence of a lack of disciplinary focus. The pressure felt by scholars to conform to norms of the field may hinder the KT efforts of scholars' if their colleagues perceive the efforts as being outside of the status-quo. (Cheney, 2007).

### **Lack of Institutional Support**

Responses suggested that a lack of administrative support in engaging public audiences, at the college and departmental levels, as a prospective barrier to KT. To demonstrate, when asked what they believed to act as a barrier to KT, Dr. Kameron noted:

I think support staff. Academics have to be extraordinarily entrepreneurial. And institutions very often are not as good as...providing other people to do the promotional work... [tenured faculty] could say, 'well, heck, you know, I got my class, I'm not going to change it, I'm not gonna do anything else. And I'm focusing on this thing (KT). That kind of assistance matters in a big way. And I think those institutions that are proactive in not just having resources...but a more proactive relationship where support services for faculty research and scholarly activity are sought out, nurtured, fostered and is driven by those faculty who want to be successful...You know, faculty have to do that themselves, and I think that's a big hindrance because faculty are busy doing other things.

Participants who expressed a lack of institutional support, indicated some variance of the importance of having more departmental support in reaching public audiences. For example, Dr. Hodges stated:

What I do think is that any institution that takes public dollars, that it is part of their business to [engage the public]. And so, and I think it is in their best interest, relative to the promotion of the institution to any and all potential students, and the general public, to be able to do that. Now, different people do that in different ways, whether those entities or those agents exists within a college or within the university writ large, or just even within a department, it varies. And so the closer you can get to the [scholars] that are generating the knowledge so that there can be expertise for those individuals that are translating it over to a lay public...the more that person who is translating it can have expertise and understanding be able to do so.

### **Research Funding Bodies**

Participants expressed that research funding can impact their ability to consider KT activities. One impact of research funding is that of a perceived prioritization of methodologies over others by the granting agency. Dr. Goldman, a tenured participant at a public, R1 institution, illustrates by expressing:

Academic institutions have become under more kind of pressure financially, you know, as funding goes down, it puts more pressure on institutions to look external grants for funding and then the grant funders want more [of the] kind of knowledge that will help them function as institutions. So, how can we do that more effectively and more efficiently? There's a center of gravity in the field that [has] kind of shifted toward more quantitative, team research, focused on issues of practical information and less of, kind of, you know more, conceptual qualitative, interpretive work.

Not all academic researchers need funding. However, participant responses suggested that external research funding, and the exposure that often comes with it, might act as an unofficial system of merit, which may disincentive some KT activities. Dr. Kameron notes:

Around financial support for researchers and other kinds of projects, the best metric is how successful somebody has been in the past. And that that will dictate how likely they are to be successful in the future.

Dr. Goldman further expounds upon the notion of funding acting as a system of merit by stating:

The rewards system [for scholars] has changed...Where if you can show you're getting grants, that you are funding your research, like "look I got a million-dollar grant and... I can translate [my research] to a public audiences,"[If you can show these institutions] that money is flowing into their universities, and you're hiring grad students, and you're funding their education through your grants, that's where the reward systems will be like "yeah, we recognize that, because that's our bread and butter baby, that is dollars!"

This response suggests that there is recognition given to those who remove the financial burden of research funding from internal bodies to outside ones. Almost all of the participants who mentioned funding as a prevalent phenomenon in the field mentioned a growing trend of encouraging faculty toward external research funding agencies.

## CHAPTER FIVE

### DISCUSSION

Responses were mixed among the knowledge transfer behaviors of participants. Participants acknowledged the need to transfer academic knowledge to public audiences, however, indicated perspective barriers to this acknowledgment. In answering the RQ, *what are the perceived obstacles of public knowledge transfer among communication faculty*, participants indicated six potential barriers to KT. Responses indicated six potential barriers to KT, which fell into either internal (career agenda, self-efficacy, the assumption of public appeal) or external categories (academic structure, lack of institutional support, research funding bodies).

#### **Internal Barriers**

The term *agenda* here refers to the career goals and interests of communication faculty, which Curtin, Malley, and Stewart (2016) argue are influenced by both self-efficacy views and outcome expectation. Furthermore, internal characteristics, such as career, derive from environmental factors such as familial upbringing, the reaction of significant others, and the environmental resources of the scholar (Lent & Brown, 2013). Responses suggested scholars were mindful of their career agendas the actions needed to achieve them.

To contextualize how self-efficacy is instrumental in KT, one must consider the means through which KT occurs, social media being one of the most prevalent. Alshahrani and Pennington (2018) argue that self-efficacy is, “one of the most significant factors that influences the use of social media for [KT]” (p. 1275). To operationalize self-efficacy, in the context of social media use for KT, Alshahrani and Pennington, (2018) indicate four main constructs. First, the performance accomplishments refer to the positive or negative past experiences which influence a scholar's ability to use social media for KT. Second, the vicarious experience or

"mimicry" of the performance and successes of those who effectively use social media for KT. Third, verbal persuasion refers to the encouragement and discouragement from colleagues or departments that influence the researchers' decisions to utilize social media to KT. And finally, the emotional arousal refers to the feelings toward social media use based on the researchers positive and negative past experiences (Alshahrani & Pennington, 2018, p. 1275).

Research suggests that a communication priority for scholars in the scientific community is getting the information out to inform the public (Motta, 2019). However, the scientific community acknowledges that while the dissemination of information to public audiences is essential, targeting and increasing the public's appeal in science should not be overlooked. Luce and Hsi (2015) argue that appeal is not exclusively due to an affinity for its content, but the preferences for a particular activity that add to aspects of one's identity that is "supported through and developed in the maintenance of interests" (p. 72). The appeal of science should not be misinterpreted as scientific curiosity. Motta (2019) posits that *scientific curiosity* is a broader, yet related aspect to public interest and appeal defining it as, "a general disposition, [that varies] in intensity across persons [which reflect] the motivation to seek out and consume scientific information for personal pleasure" (Kahan, Landrum, Carpenter, Helft, & Jamieson, 2017, p. 180). The participants in this research presuppose knowing the specific appeal or interests for which the public has an affinity.

### **External Barriers**

Academic tenure acts as an incentivizing practice (e. g., promotion and academic security), to encourage scholars to establish good research habits leading to productive academic careers (Faria & Monteiro, 2008). Often related to career advancement, academic tenure also offers scholars protection from external forces (i. e., institutional retribution or dismissal over controversial research), or decrease in teaching responsibilities (Brown, 1997). The notion of

tenure allows institutions and departments to establish guidelines that determine research emphasis and orientation (Love & Kotchen, 2010). Tenure was but one element that comprised external perspective barriers.

The structure of academia and its research can also restrict public access through its rigor, complexity, practicality, and applicability. Merriam-Webster's defines *practical* as relating to or manifested in practice or action (Merriam-Webster's dictionary, 2019). Although similar to practicality, Merriam-Webster's defines applicability as being capable or suitable to being applied. (Merriam-Webster's dictionary, 2019). The difference between these two concepts is based on the feasibility of the application and the relevance of academic research. Dr. Farris demonstrated the restrictive nature of the practicality and applicability of research by noting:

We write for each other and not for the general public...In our journals, we use esoteric language that people can't understand.

Stupnisky, BrckaLorenz, Yuhas, and Guay (2018) posit that faculty motivation for teaching and other academic acts often occur intrinsically. Career motivation within the structure of academia emerged as a potential barrier to KT as participants expressed certain actions being a necessity of their current professional situation. It is important to note the differences between types of motivation. Ryan and Deci (2000) differentiate between *intrinsic* and *extrinsic motivation* by suggesting,

[Intrinsic motivation] refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to a separable outcome. (p. 55)

Incentivizing the acquisition of research grants, according to Musambira, Collins, Brown, and Voss (2012) may be counter-product to the research process. Musambira et al. (2012) posit:

Efforts become more focused on getting grants rather than producing scholarship and researchers focus more on topics for which they can obtain funding rather than the pressing questions in their discipline or what interests them individually.

Furthermore, a heavy emphasis placed on acquiring research funding may discourage faculty from emphasizing other outcomes of the research process, such as transferring knowledge to public audiences.

Often, junior departmental faculty face increasing workloads resulting in warnings about the changing nature of academic work. The adjustment period that junior faculty face can result in increased workloads and responsibilities which participants alluded to that could act as a perspective barrier to KT. Becher and Trowler (2001) found that extra tasks and added faculty responsibilities, instituted at the departmental level, have produced less than favorable working conditions which restricts faculty research autonomy.

University media relations offices often act as a conduit through which research is disseminated to public audiences. However, university administrators may feel pressured to prioritize and publicize research that will garner the most attention to increasing the likelihood of attracting funding (Musambira et al., 2012). Declining financial support for universities nationwide has pushed institutions to push their faculty to secure external funding for their research (Musambira et al., 2012).

Findings differ slightly from that of present literature on the topic. Perkmann et al. (2013), examined university-industry partnerships, and identified three contexts (individual, organizational, and institutional) in which to engage public audiences, However, findings were supported through research which demonstrates that tenure requirements (Seeger, 2009) and internal motivation (Stupnisky et al., 2018) also influence the engagement actions of faculty. Furthermore, Boardman and Corley (2008) found that private and public funded research centers

also faced challenges incentivizing tenure-track faculty to participate, in addition to other departmental promotional requirements. Siegel, Bozeman, and Link (2007) also found that among tenure-track faculty participants, there was hesitation to participate in transferring technology to public partners out of fear that it would be detrimental in their early careers. Siegal et al. determined that this hesitation was due to insufficient rewards from transfer activities which would result in credit for promotion and tenure.

There is empirical evidence in the literature which supports career agenda, as a perspective barrier. D'Este and Perkmann (2011) identified four motivators of faculty to engagement with industry. They indicate these motivators as; (1) *commercialization* (exploitation of technology or knowledge), (2) *learning* (expected benefits from gaining new insights or receiving feedback on research), (3) *access to funding* (4) *access to in-kind resources* (using industrial equipment, materials, and data). D'Este and Perkmann (2011) further suggest that faculty are less likely to engage with public partners if not attracted by aspects of their identified motivators.

## CHAPTER SIX

### LIMITATIONS AND FUTURE RESEARCH

Barring time, academic commitments, and participant scheduling conflicts, there were few limitations in this research. Gaps in the empirical record, as it pertained to the Communication discipline and KT, posed as an initial limitation to this research. Available research in this area is concentrated toward the physical science disciplines and public-private business ventures. Understanding that the transferal of findings from this research may be limiting given the difference discipline, research interests, and faculty motive. Furthermore, the literature on this topic from the field is only exploratory and rarely were methodologies used to develop new knowledge.

An additional characteristic of this research that was potentially limiting is evident in the 42.5% response rate. The personalities of those who were willing to participate in graduate thesis research, might also be willing to engage in public KT activities. The rationale for this proposed limitation is that in emails declining their participation, faculty often stated not seeing how their participation would be any use to my proposed research. The number of participants from each research interest was a limitation in this research. In addition to the number in each research interest category, the number of categories were limiting themselves. On its website, NCA advertises over twenty areas of concentration in the communication discipline. The three broad sub-divisions of the field represented, limited this research, as a wide section of the discipline was not represented.

#### **Future Research**

Research in the area of KT and the communication discipline should look should first seek a greater representation from research interests in the field. Furthermore, future research focus on focal points of power in the academic structure (i. e., department chairs and college

deans). Research in this area could produce knowledge of additional barriers, motivators, and incentives for KT activities.

A perspective on the opinions of the general public of that of the discipline, and its research. Future research should focus on the output and potential utilization of communication research. Scholars should address whether or not communication is, in fact, being used, and how they might come in contact with communication research. A survey of the lay public might prove fruitful as it may produce possible research opportunities and partnerships.

## CHAPTER SEVEN

### CONCLUSION

#### **Implications for the Public**

The dissatisfaction toward government in the United States has extended beyond political institutions (McGrath, 2017). According to a 2016 Gallup poll, American public confidence in essential institutions are at 32%, this includes, big business, the judicial system, public schools, newspapers, trade unions, and organized religion (Gallup, 2016). This skepticism is further exacerbated by a media landscape littered with accusations of alternative facts (Schultz, 2017) and post-truth claims (Zimmerman & Eddens, 2018) which can dilute the quality and reception of scientific information, which Bucchi (2017) suggests “has a cost” (P. 890).

The communication discipline is uniquely positioned, to be both relevant and applicable to public audiences whether in interpersonal or mediated contexts. The challenges with the relevance and applicability of communication research are further aggravated by academics orienting their research toward other scholars. Research that could potentially improve the communication between people, improving their relationships, rarely reaches those that stand to benefit most. Condit (2009) argues that helping people to communicate better is done by "primarily by teaching millions of people how to communicate better" (p. 8).

#### **Implications for Administrators**

Failing to address the current incentive system for faculty, becomes a significant implication for administrators, as this could reinforce and continue a practice which can restrict a prosperous public-academic relationship (see Craig, 2018; Frey, 2009). Additionally, current research trends in the field may prove harmful long-term as questions of relevance continue to linger, from the rest of the Academy and funding agencies. DeWine, (2005) argues that the practical relevance of research can "prevent the general public from being more supportive of the

academy" which can hurt an institution's bottom line (p. 193). As relevance becomes more important due to departmental budget cuts (Kaufmann, 2011). Administrators should take into consideration how their faculty can generate and disseminate relevant, practical and applicable research through the inclusion of more KT activities in promotion and tenure guidelines.

### **Implications for Faculty**

Some tenure-track participants expressed views KT activities being more incentivized by their departments. Furthermore, incentivizing KT activities could increase the likelihood of communication research having a meaningful impact in, what Koschmann (2010) categorize as "a world that does not necessarily recognize the intellectual merits of [its] craft" (p. 432). If communication is to step out from the shadows of the more established social scientific disciplines (e.g., Psychology, Sociology, and Anthropology), it must incentivize KT activities so that scholars, and the public alike, have unrestricted opportunity to interact and learn from one another.

Further implications of these findings may be junior faculty, who have a passion for connecting with communities, being dissuaded from connecting and engaging with public audiences that may result in conflicts early in one's career. Reybold (2005) suggests that professional conflict corresponds with different levels of faculty dissatisfaction. When knowledge is transferred to public audiences, without obstruction, the field of communication increases its standing as a 'practical discipline,' which Craig (2018) characterized by the "object of study (praxis), (2) methodology (deliberative inquiry), and (3) mode of interaction with society (metadiscourse)" (p. 290).

Communication scholars can impact more than just the reference pages of other scholars or the overall effectiveness of their CVs. Keyton (2009) argues that research that does not

provide straightforward, uncomplicated "explanations for the creation, expression, and interpretation of symbols, messages, and meanings" actively hinders research ever being adoption by public audiences (p. 307). Scholars and administrators who continue to emphasize practices which orient the field away from lay-publics only stand to diminish further its relationship with communities which institutions claim to benefit. If the field of communication is ever to demonstrate its worth and validity, it must, without restriction, be able to actively engage with and transfer communication knowledge to those who can benefit its research.

## REFERENCES

- Alshahrani, H., & Pennington, D. (2018). “Why not use it more?” Sources of self-efficacy in researchers’ use of social media for knowledge sharing. *Journal of Documentation*, 74(6), 1274–1292. <https://doi.org/10.1108/JD-04-2018-0051>
- Ankrah, S. N., Burgess, T. F., Grimshaw, P., & Shaw, N. E. (2013). Asking both university and industry actors about their engagement in knowledge transfer: What single-group studies of motives omit. *Technovation*, 33(2–3), 50–65. <https://doi.org/10.1016/j.technovation.2012.11.001>
- Auteri, S. (2018, July 31). Why Parents Fear “The Talk” and What Kids Want Out of It. Retrieved September 17, 2018, from Rewire. News website: <https://rewire.news/article/2018/09/11/why-parents-fear-the-talk-and-what-kids-want-out-of-it/>
- Becher, T., & Trowler, P. (2001). *Academic tribes and territories: intellectual enquiry and the culture of disciplines* (2nd ed). Philadelphia, PA: Open University Press.
- Belle, E. (2018, March 29). How Long it Takes to Make Friends, According to a New Study | Teen Vogue. Retrieved September 17, 2018, from Teen Vogue website: <https://www.teenvogue.com/story/how-long-it-takes-to-make-friends-according-to-a-new-study>
- Boardman, P. C., & Corley, E. A. (2008). University research centers and the composition of research collaborations. *Research Policy*, 37(5), 900–913. <https://doi.org/10.1016/j.respol.2008.01.012>
- Brossard, D., & Lewenstein, B. (2010). *Communicating Science: New Agendas in Communication* (1st ed.). <https://doi.org/10.4324/9780203867631>

- Brown, W. (1997). *University Governance and Academic Tenure: A Property Rights Explanation*. Retrieved from <http://www.jstor.org/stable/40751998>
- Bryant, C. (2003). Does Australia need a more effective policy of science communication? *International Journal for Parasitology*, 33(4), 357–361. [https://doi.org/10.1016/S0020-7519\(03\)00004-3](https://doi.org/10.1016/S0020-7519(03)00004-3)
- Burns, T. W., O'Connor, D. J., & Stocklmayer, S. M. (2003). Science Communication: A Contemporary Definition. *Public Understanding of Science*, 12(2), 183–202. <https://doi.org/10.1177/09636625030122004>
- Cheney, G. (2007). Organizational Communication Comes Out. *Management Communication Quarterly*, 21(1), 80–91. <https://doi.org/10.1177/0893318907302639>
- Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, 39(3), 124–130. [https://doi.org/10.1207/s15430421tip3903\\_2](https://doi.org/10.1207/s15430421tip3903_2)
- Cultural Cognition Project. (n.d.). Retrieved October 25, 2018, from <http://www.culturalcognition.net/>
- Curtin, N., Malley, J., & Stewart, A. J. (2016). Mentoring the Next Generation of Faculty: Supporting Academic Career Aspirations Among Doctoral Students. *Research in Higher Education*, 57(6), 714–738. <https://doi.org/10.1007/s11162-015-9403-x>
- Dempsey, S., Dutta, M., Frey, L. R., Goodall, H. L., Madison, D. S., Mercieca, J., ... Miller, K. (2011). What is the Role of the Communication Discipline in Social Justice, Community Engagement, and Public Scholarship? A Visit to the *CM Café*. *Communication Monographs*, 78(2), 256–271. <https://doi.org/10.1080/03637751.2011.565062>
- Dermentzi, E., & Papagiannidis, S. (2018). Academics' intention to adopt online technologies for public engagement. *Internet Research*, 28(1), 191–212. <https://doi.org/10.1108/IntR-10-2016-0302>

- D'Este, P., & Perkmann, M. (2011). Why do academics engage with industry? The entrepreneurial university and individual motivations. *The Journal of Technology Transfer*, 36(3), 316–339. <https://doi.org/10.1007/s10961-010-9153-z>
- Ducharme, J. (2018, July 31). Micro-Cheating Could Be Ruining Your Relationship. Here's What to Do About It. Retrieved September 17, 2018, from Time website: <http://time.com/5332013/micro-cheating/>
- Dudo, A., & Besley, J. C. (2016). Scientists' Prioritization of Communication Objectives for Public Engagement. *PLOS ONE*, 11(2), e0148867. <https://doi.org/10.1371/journal.pone.0148867>
- Faria, J. R., & Monteiro, G. (2008). THE TENURE GAME: BUILDING UP ACADEMIC HABITS\*. *Japanese Economic Review*, 59(3), 370–380. <https://doi.org/10.1111/j.1468-5876.2008.00423.x>
- Fishbein, M., Ajzen, I., Albarracin, D., & Hornik, R. C. (Eds.). (2007). *Prediction and change of health behavior: applying the reasoned action approach*. Mahwah, N.J: L. Erlbaum Associates.
- Gallup. (2016). Americans' Confidence in Institutions Stays Low. Retrieved March 11, 2019, from Gallup.com website: <https://news.gallup.com/poll/192581/americans-confidence-institutions-stays-low.aspx>
- Hagger-Johnson, G., Hegarty, P., Barker, M., & Richards, C. (2013). Public Engagement, Knowledge Transfer, and Impact Validity: Public Engagement, Impact Validity. *Journal of Social Issues*, 69(4), 664–683. <https://doi.org/10.1111/josi.12035>
- Hartelius, E. J., & Cherwitz, R. A. (2016). Engagement: rhetoric's tale from the field. *Journal of Applied Communication Research*, 44(4), 453–457. <https://doi.org/10.1080/00909882.2016.1225163>

- Hilgartner, S. (1990). The Dominant View of Popularization: Conceptual Problems, Political Uses. *Social Studies of Science*, 20(3), 519–539.  
<https://doi.org/10.1177/030631290020003006>
- Jacobson, N. (2007). Social Epistemology: Theory for the “Fourth Wave” of Knowledge Transfer and Exchange Research. *Science Communication*, 29(1), 116–127.  
<https://doi.org/10.1177/1075547007305166>
- Jerrell D. Coggburn, & Stephen R. Neely. (2015). Publish or Perish? Examining Academic Tenure Standards in Public Affairs and Administration Programs. *Journal of Public Affairs Education*, 21(2), 199–214.
- Kahan, D. M., Landrum, A., Carpenter, K., Helft, L., & Jamieson, K. H. (2017). Science Curiosity and Political Information Processing. *Political Psychology*, 38(S1), 179–199.  
<https://doi.org/10.1111/pops.12396>
- Kaufman, A. (2011). A Different Question of Open Access: Is There a Public Access Right to Academic Libraries in the United States and Canada? *Law Library Journal*, 103(3), 379–393.
- Kim, S., & Krishna, A. (2018). Unpacking Public Sentiment Toward the Government: How Citizens’ Perceptions of Government Communication Strategies Impact Public Engagement, Cynicism, and Communication Behaviors in South Korea. *International Journal of Strategic Communication*, 12(3), 215–236.  
<https://doi.org/10.1080/1553118X.2018.1448400>
- Koschmann, M. (2010). Communication as a Distinct Mode of Explanation Makes a Difference. *Communication Monographs*, 77(4), 431–434.  
<https://doi.org/10.1080/03637751.2010.523593>

- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology, 60*(4), 557–568. <https://doi.org/10.1037/a0033446>
- Lewis, L. K., Hamel, S. A., & Richardson, B. K. (2001). Communicating Change to Nonprofit Stakeholders: Models and Predictors of Implementers' Approaches. *Management Communication Quarterly, 15*(1), 5–41. <https://doi.org/10.1177/0893318901151001>
- Love, D. A., & J Kotchen, M. (2010). Grades, Course Evaluations, and Academic Incentives. *Eastern Economic Journal, 36*(2), 151–163. <https://doi.org/10.1057/eej.2009.6>
- Luce, M. R., & Hsi, S. (2015). Science-Relevant Curiosity Expression and Interest in Science: An Exploratory Study. *Science Education, 99*(1), 70–97. <https://doi.org/10.1002/sce.21144>
- Men, L. R., & Tsai, W.-H. S. (2015). Infusing social media with humanity: Corporate character, public engagement, and relational outcomes. *Public Relations Review, 41*(3), 395–403. <https://doi.org/10.1016/j.pubrev.2015.02.005>
- Miller, S. (2001). Public understanding of science at the crossroads. *Public Understanding of Science, 10*(1), 115–120. <https://doi.org/10.3109/a036859>
- Motta, M. (2019). Explaining science funding attitudes in the United States: The case for science interest. *Public Understanding of Science, 28*, 161–176.
- National Communication Association. (2018). Communication Currents. Retrieved September 17, 2018, from National Communication Association website: <https://www.natcom.org/communication-currents>
- Nisbet, M. C., & Scheufele, D. A. (2009). What's next for science communication? Promising directions and lingering distractions. *American Journal of Botany, 96*(10), 1767–1778. <https://doi.org/10.3732/ajb.0900041>

- Olmos-Peñuela, J., Castro-Martínez, E., & D'Este, P. (2014). Knowledge transfer activities in social sciences and humanities: Explaining the interactions of research groups with non-academic agents. *Research Policy*, *43*(4), 696–706.  
<https://doi.org/10.1016/j.respol.2013.12.004>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed). Thousand Oaks, Calif: Sage Publications.
- Perkmann, M., Tartari, V., McKelvey, M., Autio, E., Broström, A., D'Este, P., ... Sobrero, M. (2013). Academic engagement and commercialization: A review of the literature on university–industry relations. *Research Policy*, *42*(2), 423–442.  
<https://doi.org/10.1016/j.respol.2012.09.007>
- PRACTICALITY In Merriam-Webster's dictionary. (2019). Retrieved February 2, 2019, from <https://www.merriam-webster.com/dictionary/practicality>
- Rosenbaum, L. (2017). The March of Science — The True Story. *New England Journal of Medicine*, *377*(2), 188–191. <https://doi.org/10.1056/NEJMms1706087>
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, *25*(1), 54–67.  
<https://doi.org/10.1006/ceps.1999.1020>
- Sandelowski, M. (2000). Combining Qualitative and Quantitative Sampling, Data Collection, and Analysis Techniques in Mixed-Method Studies. *Research in Nursing & Health*, *23*(3), 246–255.
- Scheufele, D. A. (2014). Science communication as political communication. *Proceedings of the National Academy of Sciences*, *111*(Supplement 4), 13585.  
<https://doi.org/10.1073/pnas.1317516111>

- Seeger, M. (2009). Does Communication Research Make a Difference: Reconsidering the impact of our work. *Communication Monographs*, 76(1), 12–19.
- Sherry, J. L. (2010). The Value of Communication Science. *Journal of Applied Communication Research*, 38(3), 302–306. <https://doi.org/10.1080/00909882.2010.490847>
- Siegel, D. S., Bozeman, B., & Link, A. (2007). *An Empirical Analysis of the Propensity of Academics to Engage in Informal University Technology Transfer*. 26.
- Southwell, B. G., & Torres, A. (2006). Connecting Interpersonal and Mass Communication: Science News Exposure, Perceived Ability to Understand Science, and Conversation. *Communication Monographs*, 73(3), 334–350.  
<https://doi.org/10.1080/03637750600889518>
- Sturgis, P., & Allum, N. (2004). Science in Society: Re-Evaluating the Deficit Model of Public Attitudes. *Public Understanding of Science*, 13(1), 55–74.  
<https://doi.org/10.1177/0963662504042690>
- The Conversation: In-depth analysis, research, news and ideas from leading academics and researchers. (n.d.). Retrieved October 25, 2018, from The Conversation website:  
<http://theconversation.com/us>
- Timmerman, C. E. (2009). Forum Introduction: Has Communication Research Made a Difference? *Communication Monographs*, 76(1), 1–19.  
<https://doi.org/10.1080/03637750802684006>
- Tufford, L., & Newman, P. (2012). Bracketing in Qualitative Research. *Qualitative Social Work*, 11(1), 80–96. <https://doi.org/10.1177/1473325010368316>
- Youn, T., & Price, T. (2009). Learning from the Experience of Others: The Evolution of Faculty Tenure and Promotion Rules in Comprehensive Institutions. *The Journal of Higher Education*, 80(2), 204–237.

## APPENDIX

### Interview Instruments

1. Tell me about your research interests?
2. Can you tell me about your research process from the conception of an idea to a finished product?
3. How important is the public communication of your research, outside of academia to you?
  - a. Do you get the idea your colleagues within your department believe the public communication of their research, outside of academia, important?
  - b. Do you get the idea researchers in your field believe that the public communication of their research, outside of academia, is important?
4. Who do you believe benefits most from your research?
  - a. Do you believe the same is true for your colleagues in the field?
5. What obstacles would you consider being associated with the public communication of your research, outside of academia?
  - a. What obstacles do you believe the colleagues in your department consider as being associated with the public communication of their research, outside of academia?
  - b. What obstacles do you believe researchers in your field consider as being associated with the public communication of research, outside of academia?
6. Through what means to you communicate your research to public audiences?
  - a. Do you believe the colleagues in your department communicate their research to public audiences through the same means?

7. What means would you consider 'the norm' of the communication of research, in your field?
8. How do you select your audiences?
9. What are areas in the field around communicating research to public audiences do you want to see change in?