1. **Purpose/Significance:**

Working together across professional boundaries is a common demand of the mental health climate today, an approach which is only tenuously supported by the research (Abolela et al., 2007). Specifically, there appears to be a high value placed on collaboration, with relatively little success in terms of documented outcome. Furthermore, the lack of proper interdisciplinary education at the graduate level leaves many psychologists to train on the job. Psychologists are in a unique position to bridge the gap between research and practice; they are often exposed to both the academic and applied aspects of the issues on which they choose to work (Feist, 2013; Goodwin, 2006; Plante, 2011). The purpose of this study is to examine interdisciplinary action (such as research and teaching) in academia and in the field with the goal of discovering the benefits and barriers to interdisciplinary work as seen by those participating in it.

This study will address three research questions:

RQ1: What factors are involved in successful interdisciplinary work, particularly involving psychologists?

RQ2: What are some barriers to interdisciplinary work, including sociocultural and other systemic barriers?

RQ3: What needs to change in the current educational climate to promote collaborative practice in psychology?
2. Methodology

A qualitative, grounded theory framework will be used to examine the research questions. This framework provides guidelines for a preliminary literature review and development of coding schemes, offering more structure than in a phenomenological method. Under grounded theory, individuals, sub-groups, and the group as a whole may be considered units of analysis, or “cases.” As specified by the guidelines of critical case purposive sampling (Patton, 2002), participants will be members of the scientific community who have studied, commented on, and participated in collaborative efforts that transcend disciplinary boundaries. Specific interview questions will be drawn from the Interdisciplinary Attitudes (see file included with submission) survey and the literature. Each hour-long interview will focus on interdisciplinary action as a systemic phenomenon and will include questions about barriers and benefits at all levels, from the intrapersonal (value barriers) to the institutional (funding barriers). These narratives will be thematically coded using open and axial coding. It is hoped that this method will reveal a clearer picture of the state of interdisciplinary action today, and that the information obtained herein will assist future psychologists to plan their degree programs.

Participants in this study will be gathered using “critical case” purposive sampling, which is “the process of selecting a small number of important cases - cases that are likely to yield the most information and have the greatest impact on the development of knowledge” (Patton, 2002, p. 236). This sampling method is best when a small number of cases can adequately describe the phenomenon under question. Therefore, cases will continue to be sampled until content saturation has occurred; it is hypothesized that a maximum of 20 will suffice. Cases will be analyzed using a grounded theory method, which allows potential codes to be identified from the literature as well as emerging from the interviews themselves.

Participants will be identified in one of two ways. First, participants will be recruited...
from a quantitative phase of a previous study in which an Interdisciplinary Attitudes survey was distributed to university faculty nationwide. This study included an area in which respondents granted permission to be contacted for an interview. In the second sampling method, the primary researcher will contact individuals with academic ties who have been identified as “experts” in the interdisciplinary realm. Public figures, researchers, interdisciplinary department chairs, and prominent thinkers are easily identified; if their contact information is available publicly, they will be asked to participate. Publicly available information, for the purposes of this study, will include contact information attached to published works, included on list-serves, or otherwise available without the use of a third-party provider such as a university directory. Using these complementary sampling procedures will ensure that interviews are sufficiently diverse to capture the phenomenon in question.

Anticipating a 20% to 30% response rate to requests for an interview is a standard estimate for telephone interviews (Dillman et al., 2008).

Therefore, approximately 100 individuals will initially be contacted. One follow-up request will be sent to those who have not responded within 10 days. If at least 20 participants have not agreed to participate, another round of recruitment will be performed with a new pool of individuals. Every effort will be made to construct a list of ideal participants large enough to support multiple rounds of sampling.

Interviews will be conducted by phone and will be semi-structured; specific questions will be developed from results gleaned from the quantitative data from the previous study and from the literature review. Interviews will be audio recorded following consent of the participant. The researcher will transcribe the recorded interviews. A standard set of demographic questions will be asked of each interviewee and will include items such as name, number/type of degrees held, and areas of interest. A copy of this and a list of potential interview questions are provided in a separate document. It is anticipated...
that each interview will last between 45 and 60 minutes. From these interviews, themes will be identified for coding analysis per the four-stage Grounded Theory method illustrated in Table 1 (Bernard & Ryan, 2010). The unit of analysis in qualitative work may be individual interviews or the group as a whole—although data analysis will begin within each interview transcript, identified themes will be used to discuss the lived experience of the participants as a group. The final presentation will include a narrative combined from interview content using direct quotes as needed to illuminate important concepts. A sample coding matrix is provided in a separate attachment.

Table 1

*Coding Analysis per the four-stage Grounded Theory method*

<table>
<thead>
<tr>
<th>Stage</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codes</td>
<td>Breaking the data into key phrases and naming the concepts. Also called <em>open coding</em> or <em>initial coding</em>.</td>
</tr>
<tr>
<td>Concepts</td>
<td>Collections of codes are grouped by concept using the <em>constant comparative method</em>, in which concepts are continually checked for fit against individual codes.</td>
</tr>
<tr>
<td>Categories</td>
<td>Broad groups of similar concepts, or themes, are used to generate a theory, again using the <em>constant comparative method</em> as well as <em>negative case analysis</em>, in which cases that do not fit the model are acknowledged.</td>
</tr>
<tr>
<td>Theory</td>
<td>An arrangement of categories that speaks to the research question in a meaningful way.</td>
</tr>
</tbody>
</table>

3. **Risks/Benefits:**

The data to be collected in this study are relatively benign and should present minimal risk to participants and none beyond what one might experience in daily life. Academics and scientists who will be sought for participation in this study generally have experience discussing their work; no intimate or controversial questions are proposed. Furthermore, these individuals will be familiar with appropriate research methods and the...
bounds of informed consent, and can therefore be considered sophisticated participants (Howard, 1998). Identifying information will not be included in the final analysis, including place of employment, credentials, and vitae. Although these may be used to create context, details will be obscured to ensure that participants cannot be reverse-identified from any interpretive reports generated from the data. For example, an interviewee working at Purdue University may be described as, “faculty at a large Midwestern University.” Special care will be taken to ensure that criticisms, particularly against a participant’s employing or funding institution, are presented in a sensitive manner. Confidentiality in qualitative research can be seen as counter to owning one’s story; in this case, protecting individual identities is not seen as a barrier to presenting the material in a trustworthy fashion.

Participants will be contributing to what is hoped to be a long-term, mixed methods investigation of interdisciplinary action. The literature is lacking agreement between the touted importance of interdisciplinary work and the logistics of conducting it, as more restrictive research methods have failed to capture elements of this phenomenon. Participants can be assured that their personal experiences will be presented holistically, including outlying information that may be cause for rejection from quantitative studies. Conceivable benefits to the body of literature include a deeper understanding of systemic barriers to interdisciplinary work across a variety of activities, including research, teaching, and program development. Qualitative perspectives are not often found in this arena, and the current study may provide the data needed to begin to address limitations noted in quantitative studies. Furthermore, the current study requires no concealment or deception, and therefore no debriefing.

Do not overstate potential benefits. There may be no direct benefit to the participant other than the sense of helping society or contributing to knowledge on the topic. For a list of common mistakes related to the risks and benefits of a study, please see the IRB Handbook.
The protective measures outlined above will ensure that participants do not experience more than minimal risk. The greatest risk is the potential for participants’ identities to be unintentionally disclosed. To address such a situation, participants’ names will be kept in a document separate from their data and only the researcher, the dissertation chair, and IRB will have access to the key which could link the participants’ names and data. The potential findings of the study will contribute to the important body of literature on this topic. Therefore, the risks associated with participation in the current study are reasonable in relation to the anticipated benefits of the findings.

4. Participant Recruitment

Individual participants will be identified in two ways, as mentioned above. They will either self-select to be interviewed after taking the Interdisciplinary Attitudes Survey as part of another study (see UOR proposal: IRB #14-372-C) or they may be recruited using publicly available contact information. In the first method, respondents to the survey were asked to indicate if they would like to be contacted for a telephone interview. If yes, they will be sent an interview scheduling email with an informed consent document attached. In the second method, individuals will be contacted using information provided on professional websites, published research papers, and similar sources. Any contact information obtained from a third party (e.g., LinkedIn, Facebook, Twitter, “Who’s Who,” etc.) will be accompanied by completed Appendix N forms or End User License Agreement (EULA) documents indicating permission to solicit participants or collect such data. Potential participants will be identified from a wide range of professions and disciplines. A list of such individuals will be constructed prior to beginning recruitment, and rounds of sampling will occur until 20 cases have been gathered.

Describe how participants will be recruited and selected.

Describe how the risks are reasonable in relation to the anticipated benefits.
5. Individual Informed Consent

All participants will be asked to provide written consent prior to scheduling and beginning their audio recorded interview. The consent form will include a specific statement and separate check off box for the participant to indicate that they agree to the audio recording of their responses. Those who were recruited using the Interdisciplinary Attitudes Survey will have indicated consent to be contacted on the final page of the survey; they will be provided further written informed consent for the interview when it is scheduled. Email recruitment of other participants will have a consent form appended that can be signed and returned electronically.

Verbal confirmation of consent prior to the interview will give participants the opportunity to address questions or concerns. To protect confidentiality, pseudonyms will be assigned to transcribed material and used to refer to individuals in the final analysis. Real credentials will only be used for demographic purposes.

The informed consent form is provided in the document named “Informed Consent Form”. All participants must acknowledge their qualifications and desire to participate in the study by returning a signed copy of the informed consent form signifying their desire to participate and confirming their understanding that they may withdraw their consent to participate at any time, for any reason, without penalty. Signed consent forms must be delivered in electronic format via email or fax.

Any participants who wish to withdraw from the study will be able to do so with a written or verbal statement at any time, for any reason, without penalty. Participants have the right to refuse to answer any question without penalty. Due to the emergent nature of qualitative research, coding is an ongoing, aggregate process that begins with the first transcribed interviews. Therefore, individuals will have one week from the interview date to
state their desire to withdraw from the study. Informed consent documents will be retained as
evidence of their initial participation, but their withdrawal will be indicated and any other data
they provide will be destroyed. Should a participant state his or her desire to withdraw after the
one-week period, every effort will be made to address the specific concerns in a way that
maintains the fidelity of the research method while retaining the participant’s contribution.
Should mediation attempts fail, the dissertation chair will be consulted as to how to proceed.

**6. Informed Consent Document**

See document labeled Informed Consent Form.

**7. Data Monitoring**

All interviews will be conducted over the telephone and recorded using a digital
recorder. Digital files will be stored on a password-protected external hard drive. Participant
identifying information will be removed from the record of the data and replaced with a
pseudonym at the transcription stage, such that real names will only be attached to the original
audio data. A spreadsheet matching real names with pseudonyms will be stored separately
from the raw data. All information, including electronic informed consent documents for each
participant, notes, and codebooks, will be kept by the primary researcher in a personal locked
file cabinet for at least five years. The final dissertation will have contact information that
interested parties can use to obtain de-identified copies of the data for their own research
purposes. If the primary researcher submits other versions of this manuscript to additional
academic forums, such as conferences and peer-reviewed journals, participants will be notified
by email.

**8. Privacy and Confidentiality**

The privacy of participants will be protected across the stages of the study. Participants
will not be in direct contact with the researcher, as interviews will be conducted over the
phone. **Recorded interviews will be transcribed by the researcher, pseudonyms will replace**
participants’ real names, and the spreadsheet used to record these pseudonyms will be stored separately from the data. Most data will be collected and stored electronically, reducing the amount of hard-copied information and increasing privacy. Individual credentials and organizational affiliations will only be used for group demographic purposes. All data will be stored on an external hard drive (informed consent documents, interview transcripts, etc.) or in hard-copy form (codebooks and notes), in a locked personal filing cabinet, for at least five years following completion of the study, per the American Psychological Association recommendations. Data will never be uploaded to the internet or into any type of remote (cloud) storage. Following the five-year period after the study is completed, all data will be purged and deleted from the data storage device and the data storage device will be destroyed. Any paper documentation will be shredded after the five-year period.

9. **Protection of Participants’ Rights**

Participants will not be exposed to any coercion or undue influence. No deception will be employed. All prospective participants will be fully informed of the research topics before providing consent to participate. In the study, informed consent shall be taken to signify that participants are aware of the topics being researched and agree to participate in the study. Given interview questions do not explore sensitive topics and the study’s procedures are outlined in the informed consent process, no debriefing will be needed. To increase safety and encourage open exchange, identities will be protected. Any special project information, institutional affiliations, funding situations, or other unique credentials or certifications will be judiciously guarded and reported only as necessary to protect participants’ privacy.

If a participant appears to be in physical or mental distress during the interview process, three potential actions may be taken. First, the topic of discussion may be changed to less impactful material. Second, the interview may be terminated, with or without a later rescheduling. Finally, the participant may be removed from the study, either at his or her request or by the
researcher. Because the research topic is of relatively low in potential physical or mental risk and participants will be fully-informed volunteers, the study design does not include contingency plans for providing third-party counseling or other support.

If the research involves any participants who might be vulnerable to coercion or undue influence (i.e., children, prisoners, pregnant women, people with mental disabilities, or individuals with educational or economical disadvantages), or involves the use of concealment or deception, describe the additional safeguards. Also provide a debriefing script in a separate document.

Contingency plans must be made if participants are asked to discuss potentially sensitive or upsetting topics. This may include provisions for referring the participant to counseling services.


The study will address three research questions:

- What factors are involved in successful interdisciplinary work, particularly involving psychologists?
- What are some barriers to interdisciplinary work, including sociocultural and other systemic barriers?
- What needs to change in the current educational climate to promote collaborative practice in psychology?

Specific interview questions will be drawn from the Interdisciplinary Attitudes survey and the literature. The following questions may include:

- How does your institution define interdisciplinarity?
- What factors at your institution promote interdisciplinary collaboration?
  - Follow up: How does the collaborative environment at your institution compare to other similar institutions in which you’ve worked?
- Are the values toward collaboration congruent with interdisciplinary action (e.g., research, teaching) at your school?
- What do you see as being the most significant barriers to interdisciplinary action?
- What can be done to make interdisciplinary work more successful, at your institution and in general (including international collaboration)?
- What does the term “transdisciplinary” mean to you?
- Have you collaborated with a psychologist before/What was that experience like?
- Have you ever presented interdisciplinary work at a conference or professional meeting? What was that experience like?
Sample Coding Matrix

This coding matrix will be used to ensure that the theoretical constructs and literature review will inform coding decisions. Codes will fit within one of the three themes listed in the right-hand column; emerging concepts identified in interview content will be identified and used to devise final code categories. Examples are given in italics and do not represent any expectations by the primary researcher.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Emerging Concepts</th>
<th>Final Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits of interdisciplinary work</td>
<td><em>Professional esprit de corps</em>; connecting with other academics or clinicians</td>
<td><em>Interprofessional connection</em></td>
</tr>
<tr>
<td>Barriers to interdisciplinary work</td>
<td><em>Differences in language and methodology; philosophical or ethical disputes</em></td>
<td><em>Symbolic barriers</em></td>
</tr>
<tr>
<td>Changes needed to the system</td>
<td><em>Increased proximity to diverse professionals</em></td>
<td><em>Intra-organizational interventions</em></td>
</tr>
</tbody>
</table>

For help with formatting APA tables, see this guide on using [tables, graphs, and images](#).
Dear (potential participant):

I am a psychology graduate student with The University of Arizona Global Campus completing a dissertation on interdisciplinary work in academia. I am seeking you out because of your interest in interdisciplinary research or the considerable contributions you have made in understanding or addressing barriers to successful interdisciplinary action in your field. I would like to interview you as part of a qualitative inquiry into these issues (personal information may be inserted here to more clearly indicate why this participant was chosen, such as comments on their professional work or publications).

The interview will last approximately one hour and will be conducted over the telephone. Questions will be semi-structured and may include items such as, “What can be done to make interdisciplinary work more successful, at your institution and in general (including international collaboration)?” “What role does the ‘publish or perish’ mentality play?” “Have you collaborated with a psychologist before?” “What was that experience like?” In keeping with the nature of qualitative research, other courses of discussion are welcome.

If you are interested in this opportunity to further the discourse on the benefits of and barriers to meaningful professional collaboration, or if you have other questions/comments regarding this project, please respond to this email or call the telephone number listed below. If you have additional questions about the research you can contact my dissertation Chair, <Faculty Name> at <Faculty Email> or <Faculty Phone number>. If you have any additional questions regarding your participation in the study or if you want to verify the authenticity of the study, please contact The University of Arizona Global Campus IRB Chair at IRB@uagc.edu.

Thank you for your time,

Name of Student
Doctoral Student
The University of Arizona Global Campus
Email address
Telephone Number
Informed Consent Form

Title of Project: Title of research study.

Researcher: Student Name (email: Student@student.uagc.edu)
Doctoral Student, The University of Arizona Global Campus
XXXX Street St., City, ST, XXXXX
Phone: (XXX) XXX-XXXX

Dissertation Chair: Dr. Professor’s Name (email: Professor@faculty.uagc.edu)
The University of Arizona Global Campus
XXXX Street St., City, ST, XXXXX
Phone: (XXX) XXX-XXXX

IRB Number: 1.

Purpose of the Study: The proposed study is designed to assess the attitudes of those working in a university setting or with academics toward professional collaboration with psychologists. This will be accomplished through open-ended interviews, to include questions about specific beliefs and practices as they relate to the integration of material from different fields.

2. Procedures to be followed: Participation entails a single, brief interview (45 to 60 minutes), consisting of open-ended questions designed to gather information about the benefits of interdisciplinary work and the barriers to completing it successfully. Information collected from your interview will be assessed along with information from other participants to improve understanding of professional collaboration among psychologists. To this end, potential participants with experience participating in, organizing, or funding interdisciplinary work related to psychology have been asked to participate. The interviews will be audio recorded. Below you will need to provide consent for the audio recording of the interview.

3. Discomforts, Risks, and Benefits: The current study will gather non-sensitive information about everyday interdisciplinary practices. You may refuse to answer any question for any reason at any time during your interview and do so without penalty. The only risk of participating, beyond risks you likely experience as part of everyday life, would be a breach in maintaining confidentiality of your identity. However, I will make all possible efforts to maintain the confidentiality of your identity by using pseudonyms and de-identification of sensitive demographic and personal information. Any publications using the data from the study will not contain your name or any other information that could be used to individually identify you or your institution.

There will be no compensation provided for participation in the study. Benefits to your participation include having a forum to discuss issues in interdisciplinary practice and being involved in one of a small number of qualitative studies on the subject. The field of
psychology, and those working closely with psychologists, may also benefit from increased knowledge about collaborating well with other disciplines.

4. **Duration/Time:** Interviews will last approximately 45 to 60 minutes and will occur over the telephone or via Skype (or similar videophone technology) at a time convenient to both the participant and the researcher.

5. **Statement of Confidentiality:** Your participation in the research is confidential. Interview data, audio recordings, transcriptions of the interview and other correspondence will be stored and secured at in a locked file cabinet in the primary researcher’s home office. Position, tenure status, and funding relationships will be summarized to protect your privacy. Names will not be associated with the interview data at any point, as a pseudonym will be assigned to each participant. All transcriptions of audio recordings will be performed by me. All notes, email and phone communications, audio recordings, memos, and other research materials will be kept confidential. Access will be limited to the researcher, The University of Arizona Global Campus faculty members associated with the study, and the Institutional Review Board (IRB). All digital data will be encrypted and physical media kept locked when not in active use.

6. **Right to Ask Questions:** Please feel free to contact the researcher with questions or concerns about this research using the contact information listed above. If you have any questions regarding your participation in the study or if you want to verify the authenticity of the study, please contact Dissertation Chair, Dr. Professor at Professor@faculty.uagc.edu. You may also contact The University of Arizona Global Campus Institutional Review Board (IRB)—confidentially, if you wish—at IRB@uagc.edu.

7. **Voluntary Participation:** Your decision to participate in this research is voluntary. You have the right to refuse to answer questions at your discretion. You may end the interview at any time, for any reason without penalty. Should you wish to withdraw, please inform me of your decision. If you do withdraw from the study, informed consent documents will be retained and all other data will be destroyed.

**Consent to Participate**

I have read and I understand the preceding information. Any questions or concerns I have regarding participation in the study have been answered satisfactorily. By checking the authorization box and signing below, I signify that I meet the requirements for participation and I affirm my consent to participate in this study, including recording of interviews. Consent provided below shall remain in effect unless explicitly withdrawn. Further, I understand that I may withdraw from the study at any time, for any reason, and without penalty.
☐ I authorize audio recording of my interview.
☐ I agree to participate in this study.

_________________________        _______________________
Printed Name                              

_________________________  _______________________
Signature                          Date

IRB Approval # XXXXXX         IRB Expiration Date: XX/XX/XXXX

To complete enrollment in the study, please scan your signed consent form and email to [email address] or fax to [telephone number].