Navigating a Ph.D.: 2018 Student and Faculty Survey Report

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Overview

The findings presented in this report are the results of two anonymous surveys, both used to collect experiences and perspectives of respondents related to going through a PhD program. Both surveys, one given to faculty members and one to current PhD students, consisted of questions falling under five broad topics: *goal setting, research identity, publishing, hierarchical dynamics,* and *general questions*. Each topic contained 2-5 questions, all of which are listed verbatim in tandem with the findings. In addition to these five topics, participants were first asked a few background questions such as demographics and characteristics of their department.

This data was originally collected to be presented at a Professional Development Workshop at the Academy of Management Conference, 2018. The full description of this workshop is found in the appendix. The workshop was constructed for PhD students in the field of organizational behavior and all of the participants for both surveys were either doctoral students or faculty within organizational behavior or very closely related fields. We believe the findings, however, are generalizable and very likely to apply across many disciplines.

Both surveys were administered online; the surveys were distributed through two methods: 1) A description of the workshop and links to the surveys were posted on the website www.phdliferaft.com and then a description of the workshop, with a link to the website for additional information, was posted to the Academy of Management – Organizational Behavior division's online community discussion board, and 2) we distributed the survey links to our professional networks and encouraged precipitous distribution through a snowball method.

Below, you will find a summary of our findings by question, as well as some key take-aways based on our analysis of the responses. Please do not use or distribute this information without crediting the source. If you would like further information or have any questions, please feel free to reach out to us – our e-mail addresses are listed below.

We believe that respectful, open communication and strong peer support among PhD students can greatly influence the learning experiences that people have during their PhD programs. This can help people to build self-efficacy and maintain motivation toward their desired role in the process of scientific discovery and application.

We hope that these survey results might be helpful toward this goal.

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Top 5 Take-Aways

- PROJECT & SELF MANAGEMENT Time and energy management emerged as a key challenge for both students and faculty. Faculty emphasized that you will not have more time for research once you are a faculty member because you will have new responsibilities. Experiment with different time and energy management techniques now to figure out what works best for you in accomplishing your goals. This may mean trying something out that you learn doesn't work for you, and you realize you were very inefficient, unproductive, or unhappy for a few days or weeks. Use that learning to iterate. In the long run, understanding how to best manage your time and energy will be worth the temporary bumps in the road.
- POWER & POLITICS Many students and faculty expressed negative experiences with political and hierarchical dynamics, but not everyone. While these sorts of interpersonal struggles are probably difficult to avoid completely, political dynamics are more likely to occur where there are strong group faultlines (whether that's macro/micro, social psych/OB, senior/jr. faculty, or even differing views on what success means in this field). Students may find places and relationships where political concerns are less likely to develop (or less likely to be lurking under the surface) by seeking faculty who are broadly open to respectfully engaging with scholars that are unlike themselves, and who have a track record for doing so. While differing perspectives and shifts in consensus evolves science, tribalism does not.
- IDEALISM VS. PRAGMATISM In several ways, students mentioned struggling with the tension between idealism and pragmatism in this career. Some students expressed a disenchantment with perceiving that others' priorities had to do more with publishing papers than understanding or improving the world, yet at the same time also grappled with how much of their own decision making should be influenced by the goal of publishing (who to work with, what topics to work on, etc.). While navigating this sensemaking process, students can take heart in knowing that it is not a true dichotomy (it is possible to do interesting, important work and publish it!) yet there are also others who struggle with the same tension. And, several of the quotes from faculty members below are likely to be helpful. Still, not everyone shares the same vision of success in this career, and that's okay.
- JUST DO IT Students expressed a great deal of uncertainty around the amount and direction of effort that they need to put toward research projects. This is not terribly surprising, given that the outcomes of one's efforts often aren't seen until several years after a project is started, and many students have only even been in the field for a few years, if that. Insights from the faculty survey can be helpful in this area. Big themes that emerged across a few of the questions were:
 - Start projects earlier in your program; as early as possible
 - Seek feedback and friendly reviews of writing/ideas early and often earlier than you're probably comfortable doing it. This will help you to figure out what your most promising ideas are and push those forward.
 - \circ $\;$ Set concrete goals and develop action plans to accomplish them
- STUDENTS NEED FACULTY Students heavily emphasized how crucial working closely and often with
 faculty members is for their development and learning. Of course, peers can also make an enormous
 difference in learning and overall well-being during a PhD program. But, students should not hesitate to
 ask for the guidance and mentorship that they need from faculty, and try to remember this when we're
 on the other side of the job market.

Sample

- N = 24-39; Thirty-nine participants completed the survey. Not all participants answered every question, however, resulting in some questions having fewer than 39 responses. All main questions have at least 24 responses.
- Participants were roughly evenly spread across years/levels of their programs, with at least a few students representing each year
- Students' departments:
 - Demographic variability: high across departments and sometimes within department; some "all very old white men" and some diverse on various dimensions, such as tenure, gender, and/or race.
 - Size of departments: between 3-30 OB tenure-track faculty
 - Area of focus for program: 60% reported a very strong research emphasis; 20% a moderate research emphasis; 20% a balanced research-teaching emphasis
- Faculty-to-Student ratios were generally low, most students reported this as between 1:1 and 3:1 (faculty:student)

Goal Setting

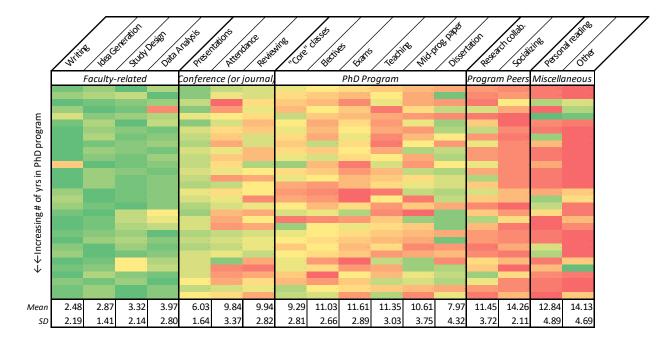
Goal Setting Question 1: "Many of the activities that PhD students spend their time on are mutually reinforcing toward the larger goal of becoming a productive and insightful scholar and professor, yet there are undeniable tradeoffs in how students choose to focus their time and energy.

Please rank the following activities according to those that you believe will produce the most value in leading you toward this larger goal (1=most valuable; 17=least valuable, but not necessarily zero value)."

Note: A full list of items as they were listed in the survey can be found in the appendix.

Findings:

N=31. The following heat map displays the rankings of each participant for the seventeen items. The items are listed across the top of the heat map, grouped according to topic (e.g. "Faculty-related"). Each row represents one participant's ranking choices. Participants are ordered according to ascending tenure in their PhD programs, from top to bottom of the table. Each cell is colored according to the ranking that a given participant gave a given activity, with a ranking of 1 (most valuable activity) being the darkest green and a ranking of 17 (least valuable activity) being the darkest red. Means and standard deviations of rankings for each item are given at the bottom of the table.



Goal Setting Question 2: "What is the #1 area of uncertainty for you in regards to goal setting?" (Free response)

Findings: N = 27. Free response answers were coded and broad themes emerged. These are listed below, along with examples.

Theme #1 - Speed/Timeline uncertainty (12 mentions)

• Such as: Am I doing enough now? How fast should I be going? How long will it take to publish something? How much should I have at what point in the pipeline?

Theme #2 - Operational uncertainty (7 mentions)

• Such as: What exactly do these journals want? How do I get funding? How do I get a field site?

Theme #3 - Directional uncertainty (5 mentions)

• Such as: What should I be doing? What should I be spending time on? Which projects are worth my time?

Several comments did not fit these themes, including: broad uncertainty about the future (2) & other (3).

Goal Setting – Further comments: "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 10. Notable or representative quotes:

- "I wish my program would have more structure in the sense that less time was wasted on trying to figure out what one "should" be doing."
- "It's hard to answer this question in terms of what I believe truly makes a well rounded scholar vs what I know the priorities should be to be competitive in the job market."

- "Yes, one thing that seems to have been overlooked is helping students find out what kind of researcher they want to be. For example, do they love theory building more than testing? Do they want to be on the bleeding edge of theory, and accept the risk that comes with that? What kinds of methods best fit with the type of researcher they want to be (see Edmondson & McManus, 2007). That would have helped a lot earlier in my program."
- "I don't really see a lot of these activities as separate activities. I think really good work involves iterating through these quickly such that the lines begin to blur of when one activity begins and the other starts..."

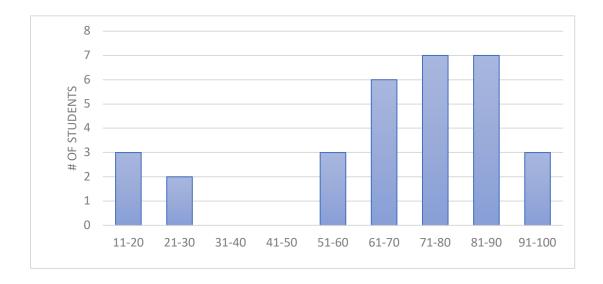
Research Identity

Research Identity Question 1: "While it may be difficult to quantify, to what degree would you say you have a well-defined and specific "research identity"?

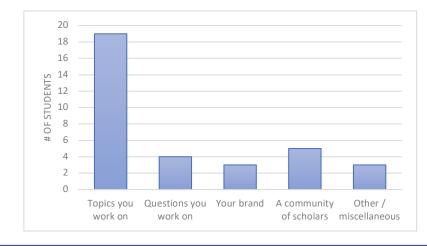
0 = All the topics are equally thrilling! I just know this field as a whole fascinates me.

100 = For example: I am a trust and identity scholar who studies the intersections of trust and identity in the workplace, such as my recent paper on the ways that selectively revealing one's different identity elements allows them to gain the trust of superiors in situations of high uncertainty."

Findings: N = 31. Note that response was not correlated with year in the program.



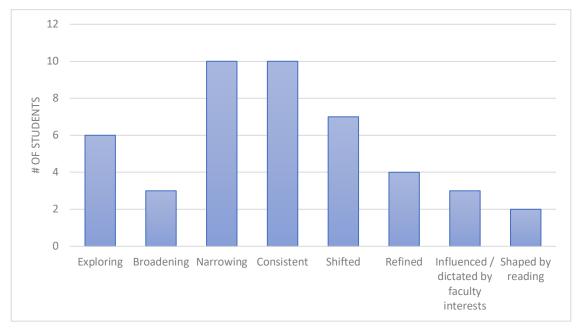
Research Identity Question 2: "If a non-academic friend asked you what a "research identity" is, how would you describe the concept to them?" (Free response)



Findings: N = 30. Responses were qualitatively coded and four themes emerged, shown in the graph below.

Research Identity Question 3: "How has your research identity evolved since beginning your PhD, if so?" (Free response)

Findings: N = 31. Responses were qualitatively coded and eight themes emerged, shown in the graph below. Some responses may have reflected more than one theme.



Notable or representative quotes:

"It has not evolved much on a personal basis, but has instead been impacted more by faculty interests.
 For example, faculty may reach out to me asking if I am interested in joining their research projects and I may agree, albeit it being slightly tangential to my core interests, out of fear of missing out on a great publication opportunity."

• "It's gotten a lot more specific. I didn't realize how much research I wasn't really into until I was exposed to a lot more work. It quickly became apparent though that I liked certain kinds of work and not others."

Research Identity Question 4: "Though a cyclical, evolving process, which would you say has been MORE true for you: (multiple choice, single answer)

- Research identity has followed from research activities/projects worked on
- Research activities/projects worked on have followed from research identity"

Findings: N = 31.

- Research identity has followed from research activities/projects worked on: 13
- Research activities/projects worked on have followed from research identity: 18

Research Identity – Further comments: "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 11. Notable or representative quotes:

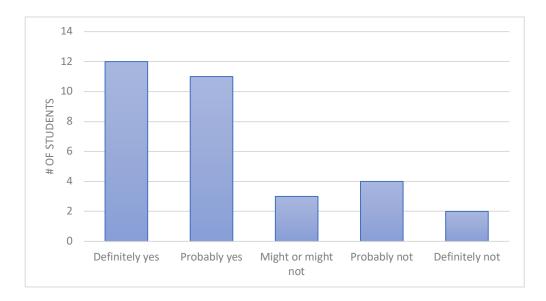
- "Different programs seem to have different approaches to helping students craft a research identity. Sometimes it's a derivative of an advisor, and sometimes it's more uniquely crafted. There are implications of this for how quickly one's publication record can develop (this is also dependent on how much a program focuses on mentoring and developing students; it's not a direct relationship)."
- "I think both ways are fine. Some people have narrow, clear interests and others have broader interests. There's not a right way to do this."
- "I wish that I had more room to truly follow my passions as opposed to helping faculty further develop theirs. I slightly fear that this may get in the way of establishing the research identity I desire to have!"
- "I think research identity is overrated, and something that faculty should stop insisting that PhD students artificially construct. Soul searching is great, but the personal branding in our field is getting out of hand.

To quote Steve Jobs, "You can't connect the dots looking forward; you can only connect them looking backwards." ... the field may be better off by letting the data (i.e. our work itself) speak for itself over the length of our career, rather than encouraging students to reduce themselves to a single construct or topic area..."

Hierarchical Dynamics

Hierarchical Dynamics Question 1: "Has consideration, navigation, and/or influence of intradepartmental hierarchical dynamics played a large role in your work life?"

Findings: N = 32. Participants were given 5 options, tallied and shown below.



Hierarchical Dynamics Question 2: "Considering your department, how would you describe the landscape of hierarchical dynamics among the various actors? How has this been salient or significant to your experience?" (Free response)

Findings: N = 29. Free response answers were coded and several themes emerged.

Many participants mentioned some to "a lot of politics" going on in their department, but not everyone. Broad themes that came through are:

1) Political dynamics appear to be heavily correlated with strong group lines (whether that's macro/micro or psych/OB or senior vs. jr. faculty, etc.).

→ Students may be more likely to find places and relationships where political concerns are less likely to develop (or less likely to be lurking under the surface) by seeking faculty who are broadly open to respectfully engaging with scholars that are unlike themselves, and who have a track record for doing so. While differences and shifts in consensus evolves science, tribalism does not.

- 2) There were many comments from students who perceive a lack of awareness among faculty of the needs of students, whether that's personal needs (e.g. maternity leave) or academic needs (hands on experience, not just heaps of advice).
- 3) A few students did report low or very low levels of political dynamics in their departments. They mentioned experiencing high collegiality in various ways, such as a low power distance between faculty and students, faculty who go out of their way to help students, and places where there is a strong hierarchy but it is functional, not divisive or harmful.

Notable or representative quotes:

"Absolutely. Getting change and help from people higher up the hierarchy feels next to impossible. This
has had a huge impact on (for example), a new mother in my program trying to access nursing resources
and maternity leave benefits, myself as I tried to seek help following sexual harassment from another
student, and a student suffering from crippling depression. The hierarchy and bureaucracy at my school
makes accommodation INCREDIBLY difficult to obtain."

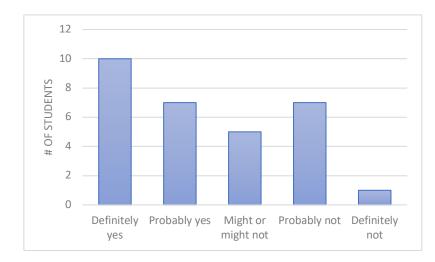
- "Much more political than the faculty admit. Senior faculty underestimate how much students need them and overestimate how much tacit knowledge they have effectively passed on. Advice is given freely, and often in a manner that is too heavy-handed or undermines the intuition of the student. Practical application and experience, on the other hand, is not so easy to obtain; faculty members are often too busy to offer these things to students."
- "Our faculty's offices are on a floor above ours, so they are literally above us. Some of our faculty are so accomplished that they will only work with doc students if their project or idea is already super promising.

This makes things tough because only certain faculty can chair dissertations. The ones that end up chairing are the ones that are less accomplished or in the very middle of their careers. I think it would be beneficial to incentivise later-career stage researchers to be more guiding for doc students."

- "Accomplishments of faculty members are well known and can be intimidating. This often affects how we allot our time."
- "Faculty and students are collegial between and among each other, however, there are certainly power dynamics that influence how students go about working with faculty."
- "People don't say what they mean and it's hard to know how to talk to one person vs another about my research."
- "The dept I belong to has a lot of younger faculty members and so the hierarchy doesn't seem very salient to me. It is also a very collegial atmosphere which limits the extent to which a hierarchy would dictate students' behavior."
- "Our department has a split that started many years ago, and my committee is a combination of people from both sides of that split. I have noticed that in working with my committee, it seems that professors from each of those sides have different ideas about what my work should look like and how I should go about it, though ultimately, my advisor (who is on one side of that divide) helps me figure out how to navigate these issues."
- "It's a general free-for-all in terms of who to work with/do research. The faculty generally are fine with us working with whoever, which is nice."

Hierarchical Dynamics Question 3: "Do you think that you've changed your approach to intradepartmental hierarchical dynamics since entering academia?"

Findings: N = 29. Participants were given 5 options, tallied and shown below.



Hierarchical Dynamics Question 4: "If you answered probably or definitely yes to the above question – how so?" (Free response)

Findings: N = 17. Free response answers were coded and a main theme emerged.

The main pattern that emerged across these responses was that many people reporting having become much more aware of how intradepartmental, and even intra-field, dynamics affect what we work on and how our work is done. Some people feel they have to cater to these dynamics in order to be successful and it can be overwhelming, other people acknowledge and try to avoid the "landmines".

Notable or representative quotes:

- "My adviser gave me some great (and realistic advice). Being right doesn't matter. How people perceive you, and the influence they may have on your outcomes later, matters."
- "I'm increasingly tentative, more aware that my actions may be seen as allegiance to one side or another, the old way or the new way. It's hard to pick an advisor, feeling like that means I'm picking sides. And I'm in a very collegial department!"
- "Honestly the nonsense of intradepartmental dynamics is exactly what I expected it to be."
- "I'm just much, much more aware of how intradepartmental hierarchical dynamics can change peoples' work lives."
- "I didn't really know anything about departmental politics before I started grad school. The main thing to learn is that all dept are fields of landmines, and that keeping your head down is a good call in general."
- "SO MUCH POLITICS"

Hierarchical Dynamics – Further comments: "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 6. Notable quotes:

- "My program is not prepared to help students who do not fit the default, whether that is because they
 are a parent, have experienced racial or gender harassment, suffer from mental or physical disabilities,
 or simply don't do well in the sink-or-swim environment. It makes me wonder, if scholars of
 organizational behavior, structure, and culture can't fix this in their own backyard, how are we supposed
 to help anybody else?"
- "I wish that some of these dynamics were more explicit we can often feel them as students even if we are not privy to what is actually going on, and this extra step of us trying to understand and navigate those unspoken dynamics takes away time from other things."
- "I found the political undercurrent surprising. And I "found" it at all mostly through my own missteps! Awkward."

Publishing

Publishing Question 1: "What are the biggest mysteries to you about the publication process?" (Free response)

Findings: N = 30. Free response answers were coded and several themes emerged.

These themes were, in order of prevalence (most prevalent at the top):

- What do reviewers want?!
- Understanding each journal's niche/focus
- How to know when something is ready to submit
- It ALL seems so random and ambiguous
- How some PhD students manage to get (SO many) pubs during their PhD

Publishing Question 2: "Please describe the experience that has taught you the MOST about how to prepare and submit a manuscript to a journal:" (Free response)

Findings: N = 27. Free response answers were coded and one main theme emerged.

A main theme among many respondents was that working closely (including high frequency of interaction and concrete feedback) with professors led to the most learning in this area.

Notable or representative quotes:

- "Doing it, with a lot of hands-on help from an advisor who actually took part in the writing process. The draft back-and-forth was SUPER helpful."
- "Publishing my first, first-author paper probably taught me the most, but since then I've learned that people should submit papers much earlier than most of us are naturally inclined to do. It doesn't have to be perfect, so submit it earlier." (rising 6th year)
- "Working on a project with a faculty member that was submitted to a journal. Then leading a project assisted by a faculty member and submitting it to a journal. Then doing both of these things over and over because it kept getting rejected. Then finally having one hit. Just exposure, really."
- "You can get amazing feedback from a paper (conference awards, tons of positivity from friendly reviewers, etc.) and still get rejected from all the top journals."
- "Get friendly reviews from people who have experience publishing in the journals you are planning to submit to."

Publishing – Further comments: "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 1. Notable quote:

• "I think the best off-hand comment I heard was a professor say that he wished he'd thought about the target journal before doing the research so that he could have tailored it more towards their standards. Seems like I should start with the end in mind."

General Questions

General Question 1: "What have been the moment(s) during your PhD when someone said or did something that helped you believe in yourself as a scholar?" (Free response)

Findings: N = 29. Free response answers were coded and several themes emerged.

Themes included:

- 1) The words and actions of faculty members, even small encouragements, mean *a lot* to students. Several students also emphasized how impactful it can be when faculty devote meaningful time to doing research with them.
- 2) Students reported that small encouragements from other peers mean a lot, too don't underestimate your power to build others up.
- 3) Conference awards, while not necessarily directly indicative of publication potential, were reported to be very helpful for motivation.

Notable or representative quotes:

- "My advisor asked each of his students why we were in grad school, and what success would mean to us. It helped me stop defining myself by our program's standards or some measure of prestige in the eyes of others. In essence, he helped me learn to measure myself and my work by my own yardstick."
- "Getting recognition at AOM was nice and so was passing my comprehensive exam. Most of my doubts and worries have stemmed from situations where I was doing work I didn't like or on topics I didn't particularly care for. When doing research on topics I like, I really am not too worried and don't think the job is particularly more difficult than any others. Our work just takes a ton of time and it's really important to do a little each day and keep in mind that the process is inherently long."
- "My advisor sent me a glowing recommendation letter that she wrote for a research grant I was applying to. While I did not ultimately get the grant, being able to read her praise and evaluation of how my research has progressed and where she saw my research career going in the future was immensely helpful. I think often we, the students, struggle to understand how we fit into the larger academic system and so getting feedback and how others see your research fitting in with others is really helpful."
- "When my faculty advisor (multiple) told me to have more confidence in myself: it seems like they see something in me I don't see yet."

General Question 2: "If you could tell your faculty members one thing about PhD students that you wish they knew, what would it be?

The first thing that comes to mind may seem too idiosyncratic to be useful for a broader audience, but don't underestimate the possibility that what you've experienced could actually be uniquely valuable to someone else." (Free response)

Findings: N = 29. Free response answers were coded and several themes emerged.

Themes included:

- 1) Students would tell their faculty that they need more **concrete**, **specific feedback** this came up again and again
- 2) Students would also tell their faculty that they **need the faculty's time/hands-on guidance** on projects in order to be successful (which they felt perhaps faculty don't realize the extent of)
- 3) Students would also tell their faculty that they **want to be treated respectfully,** as whole people who have value to contribute, but also with a recognition that they are still in the developmental stage of *this* field and do need hands-on mentoring as well

Notable or representative quotes:

- "I feel that faculty tend to assume that the power distance with PhD students is smaller than it actually is, particularly with female and minority students. It would be a huge help if faculty were more cognizant of this."
- "[We] are constantly wondering if [we] are behind schedule, and little reminders that things are going fine are worth the world."
- "We're all a little clueless, and probably a little arrogant, when we first show up. Please be patient, and give us more than one chance. Also, please be direct in both positive and negative feedback. Best if you can be direct and gentle, but if you have to sacrifice one...sacrifice gentleness."
- "Students are probably involved in way more commitments, projects, and time commitments than you [faculty] are aware of. When in doubt, assume they have more, rather than less, on their plate than they should have. Also, most students themselves are probably not likely to admit this."
- "We understand this is supposed to be a journey and that we need to do a lot of things ourselves, but we could be so much more productive and efficient with just a little more guidance."
- "PhD students need each other. My peers have been the most important part of my grad school experience. Set students up to collaborate and help, not compete."

General Question 3: "What's one expectation you had about being a PhD student that turned out not to be true?" (Free response)

Findings: N = 24. Free response answers were coded and several themes emerged.

Themes included:

- Students thought having an impact on the real world and/or broader curiosity about life would matter more to other scholars, but now perceive that what matters to others is climbing the career ladder and/or getting publications (for the sake of publications)
- Students expressed beginning with a belief that success in this line of work is driven by hard work and dedication, but it seems more random and about luck

- Students were surprised by a lack of social connection in the field/at work; that the work itself is more isolating or lonely than expected
- A few students came in with the belief that they wouldn't be able to have a social life but have been surprised that they are able to after all

Notable or representative quotes:

- "I really thought I could spend my effort shaping ideas that would influence practice. As it happens, not only is a practice focus not a good way to get tenure; it's also a great way to not be taken seriously at all."
- "I thought there would be more consistent mentorship, and less politics than industry. I thought people would be more broadly interested in life, but many people I come across are much more niche in their interests and seem more interested in climbing rather than really embracing the life of the mind as an end in and of itself."
- "That there would be more collaboration and talking with other people. Sometimes I'll go a whole day without talking to anyone else at work."
- "I underestimated the emotional rollercoaster (which is heightened by working so independently)."

General Question 4: "While there are a LOT of ups and downs throughout a PhD, if you had to make global judgements up to this point in time, to what extent have the following things been a source of stress for you during your PhD?

0 = usually not stressful; this may come more easily for me than others 10 = the bane of my existence, at times"

Note: Participants were shown the following 8 items and for each item, given a sliding scale ranging from 0 to 10, with markers at increments of 1. The default position of the slider was at 5.

Items:

Being able to spend quality time with people who are important to you outside of work Coming up with promising research ideas Executing promising research ideas Time and energy management Departmental interpersonal or hierarchical dynamics Taking time for your own needs Maintaining physical health Balancing research with other work-related demands

Findings: N = 30. Themes that emerged were:

While much of the variance in stress associated with the above topics appeared idiosyncratic, <u>"Time and energy management"</u> emerged as highly stressful for almost all students and across all stages of a program. "<u>Executing promising research ideas</u>" was the next most stressful topic for many students, followed by "<u>Coming up with promising research ideas</u>".

- Rising 2nd-year students were generally highly concerned with "Balancing research with other workrelated demands", and more so than students in any other year. This may be related to many students needing to balance classes, studying for qualifying exams, and research or mid-program projects during their second year.
- Surprisingly, rising 5th-year students seem the least stressed, overall, as a group.

Sample

- N = 13-15. Fifteen participants completed the survey. Not all participants answered every question, however, resulting in some questions having fewer than 15 responses. All main questions have at least 8 responses, most have 13.
- Primarily Jr. Faculty: participants had between 1-11 years of experience as a faculty member, with only 3 having more than 5 years experience. All were in tenure-track positions (or tenured).
- Departments
 - Demographic variability: high variability across departments and sometimes within department; some homogenous and some diverse on various dimensions, such as tenure, gender, and/or race.
 - Current department size: 2-13 OB faculty (tenure-track or tenured)
 - All participants reported a medium to strong research focus within their department
 - All participants reported a low to moderate teaching focus within their department
- All respondents have been on a hiring committee except for one.

Goal Setting

Goal Setting Question 1: "Many of the activities that students spend their time on in a PhD program are mutually reinforcing toward the larger goal of becoming a productive and insightful scholar and professor, yet there are undeniable tradeoffs in how students choose to focus their time and energy.

Please rank the following activities according to those that **you** felt produced the most value in leading you toward this larger goal (1=most valuable; 17=least valuable, but not necessarily zero value):"

Note: A full list of items as they were listed in the survey can be found in the appendix.

Findings: N = 13.

Note that participants' responses reflect the currently judged value of their past experiences, during their own PhD program. The following heat map displays the rankings of each participant for the seventeen items. The items are listed across the top of the heat map, grouped according to topic (e.g. "Faculty-related"). Each row represents one participant's ranking choices. Participants are ordered according to ascending tenure as faculty members, from top to bottom of the table. Each cell is colored according to the ranking that a given participant gave to a given activity, with a ranking of 1 (most valuable activity) being the darkest green and a ranking of 17 (least valuable activity) being the darkest red. Means and standard deviations of rankings for each item are given at the bottom of the table.

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SD	2.91	2.73	2.18	3.20	2.36	2.69	5.12	3.12	3.45	3.04	4.39	3.97	4.07	4.71	2.18	4.12	4.05	1

Goal Setting Question 2: "What is the #1 mistake you see PhD students make in regards to goal setting? This can relate to a certain stage in the program or type of activity or be more general." (Free response)

Findings: N = 13. Free response answers were coded and several themes emerged.

The two most prominent themes were:

- Starting research too late in the program
- Taking on too many projects/ spreading themselves too thin

Other topics that appeared several times were:

- Lacking clearly defined goals
- Placing too much focus on program deliverables
- Waiting too long before seeking feedback (e.g., on ideas, on writing)

Notable or representative quotes:

- "Viewing advisors as judges rather than collaborators. This leads to taking an "undergrad" mindset to showing work, spending too much time perfecting something (i.e., a draft, analyses, ideas) that will need to be rebuilt anyway."
- "NOT following the maxim: "Work fast, think slow""
- "1a. Not setting concrete research goals with deadlines. 1b. Thinking that coursework/grades/etc. counts as progress."

Goal Setting – Further comments: "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 2. Notable quotes:

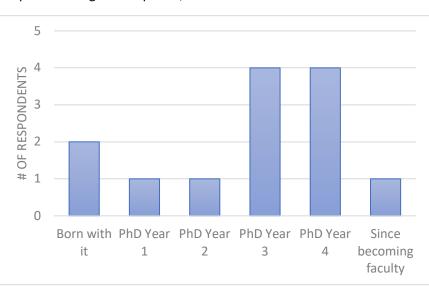
- "It can be difficult to remember in grad school that publishing papers is the main goal, and easy to think that doing coursework, conferences, etc. "counts" as research work. But if these activities are not concretely/directly creating to a published paper, then they are not actually helping you move forward. Published papers are the currency of the realm."
- "Not sure how informative ranking those activities will be. Most of them are necessary steps in either research or socialization; the question is how much time you spend on them.

Anything that helps you learn to do the work (defined as publishing interesting and important research in journals the relevant audience will read) is good! That learning happens by trial and error, which should facilitated by a more expert advisor/collaborator. In other words, waiting until you are "ready" to do something well is already too late - just try it, screw it up fast, and try again.

If your advisor is abusive or neglectful, get out fast - talk to someone else in the department, and try to find a new situation (obviously, there's a much longer discussion to be had, but these issues are shockingly common)."

Research Identity

Research Identity Question 1: "While it may be difficult to pinpoint a specific moment in time, at what point during your academic journey would you say you gained a substantially larger sense of your research identity?"



Findings: N = 13. Participants were given 6 options, tallied and shown below.

Research Identity Question 2: "What words of wisdom would you offer to PhD students on how to think about their research identities? (feel free to narrow in on stages of the program or be more general)" (Free response)

Findings: N = 13. Free response answers were coded and several themes emerged.

Themes included:

- Follow your interests!
- The commonalities will be clear in hindsight
- Try not to worry so much about your "research identity" stay focused on your interests instead of getting drawn away from them

 \rightarrow This also speaks to a lot of student comments that reflected feeling pressure to get on faculty's projects and feeling pressure to do what's interesting "to the field"

Notable or representative quotes:

- "It is easier to define a research identity looking backwards chase a few different projects or literatures that you like, then look back and try to see what they have in common (the "underlying cosmic logic" – see Kathleen Sutcliffe's MOC distinguished scholar speech)"
- "PhD is a tough challenge requiring constant motivation. Having a research identity helps. I haven't had any. Instead, I get motivated by searching for an identity as I keep working on interesting ideas."
- "Don't until you have to. That's a silly thing to worry about until you are on the market and you have to explain it."
- "Trust that things you are interested in are connected (by you) and, with practice, you'll be able to articulate the connection between those interests."
- "Follow your heart research something that is deeply emotional/meaningful to you."
- "(1) Keep a daily journal of questions and ideas that interest you; (2) Keep a document of your favorite journal article you read each week; (3) Do a content analysis across both to find the patterns-- and ask faculty members what patterns they see."

Research Identity Question 3: "How has your research identity evolved since becoming a faculty member, if so?" (Free response) or be more general)" (Free response)

Findings: N = 12. Free response answers were coded, but no prevailing themes emerged.

Notable quotes:

- "I find my interests shifting yet again, but I'll be saving those ideas for post-tenure. I need my promotion and tenure application to have a coherent research program/theme, so I'll be sticking with my current topic for the next few years."
- ""Research Identity" isn't a stable entity that exists at any one time. It is a set of interests that are
 mutually and dynamically influential over time. These questions are kind of misconstruing what it is. For
 yourself, your identity as a researcher are the things you choose to do. The outside world's perceptions
 of your identity (i.e., researcher as a brand) don't matter most of the time. Until a student is on the
 market, I would advise them to spend no time or energy on this topic."

Research Identity Question 4: "Though a cyclical, evolving process, which would you say has been MORE true for you: (multiple choice, single answer)

- Research identity has followed from research activities/projects worked on
- Research activities/projects worked on have followed from research identity"

Findings: N = 13.

- Research identity has followed from research activities/projects worked on: 9
- Research activities/projects worked on have followed from research identity: 4

Research Identity – Further comments: "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 3. *Notable quotes:*

- "Writing the research statement can be an excellent opportunity / exercise for thinking hard about your own work, interests, portfolio from a more abstracted level, and thus help you see your overarching identity more."
- "Doing interesting, important, rigorous research = good. Worrying about what others think of your research = bad.

If it helps you to try to make sense of why you are interested in what you are interested in, go for it! You also need to find others who share at least a subset of your interests. So far as the concept of "research identity" helps you do that, it is fine to think about it. However, I feel like too many people use this as a way to stress themselves out for no reason."

Hierarchical Dynamics

Hierarchical Dynamics Question 1: "Has consideration, navigation, and/or influence of intradepartmental hierarchical dynamics played a larger role in your work life: (multiple choice, single answer)

- As a PhD student
- As a faculty member
- About the same for both PhD and faculty experiences"

Findings: N = 13.

- As a PhD student: 5
- As a faculty member: 3
- About the same for both PhD and faculty experiences: 5

Hierarchical Dynamics Question 2: "Considering your PHD PROGRAM/institution, how would you describe the landscape of hierarchical dynamics among the various actors that made up the department at that time? How was this salient or significant to your experience?" (Free response)

Findings: N = 12. Free response answers were coded and two broad themes emerged. The first is that people felt PhD students (in their department, where they were a student) were shielded from politics. The second is that often there was a lot of power distance felt between students and faculty.

Notable or representative quotes:

- "Luckily, PhD students were not exposed to intra-departmental politics. However, I was not feeling comfortable sharing my ideas with my advisor because of the power distance."
- "The dept chair treated doc students as "colleagues in training," insisting that we call him by his first name, and inviting us to attend most faculty events. This helped me transition better into becoming a faculty member. As I got further into the program, I began calling some of my professors by their first name (not all though)."
- "People at the top of the hierarchy did NOT necessarily get there because of strong research or having the best ideas."
- "There was a gravitas for tradition, "the way we've always done things". Playing by those rules was
 almost essential for faculty to be successful. I imagine it's that way a lot of places. There was one
 assistant professor who, with good intentions, had many ideas on how things could be done differently
 (better). Regardless of whether he was right, his message was framed all wrong. He was far too critical,
 and gained a lot of enemies because of it. He isn't there anymore."
- "Huge behind-the-curtain politics, moderate center-stage politics. It can REALLY MATTER so make sure your advisor is ready to go to bat for you when interacting with external AND INTERNAL professors."

Hierarchical Dynamics Question 3: "Considering your CURRENT institution, how would you describe the landscape of hierarchical dynamics among the various actors that make up your department? How has this been salient or significant to your experience?" (Free response)

Findings: N = 12. Free response answers were coded but no strong themes emerged.

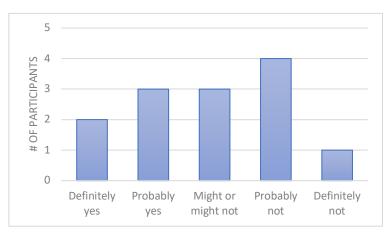
Notable quotes:

- "My current department is quite free of politics, which is great. My previous department thought it was, but there were conflicting views of what was important (e.g., Is it important to teach executives? Develop a new elective? Publish in HBR?). This didn't lead to open conflict, but led to junior faculty getting conflicting messages that were inconsistent with the eventual evaluation standards for the school and university."
- "I don't feel very affected by intradepartmental dynamics now. So long as you publish in top journals (and go on the market when you go up for tenure), you will be fine for tenure. But there are certainly senior people who want to control things they shouldn't be trying to control or who want you to "collaborate" with them - which might mean do all the work to get them published - or who seek deference and admiration from you. I just do the things I think are important for being a good colleague, say no to the rest, and publish often and it has worked well for me."
- "Just as important as intra-departmental dynamics are inter-departmental or inter-school dynamics. If OB is the weakest group in the school, and the Dean is from Finance, then its judgement and candidates

for promotion may be judged differently. Similarly, if you are at a prestigious university with a newer business school, and the sciences put up amazing, world changing scholars for promotion, but the b-school is just trying to recruit anyone who can stick, problems emerge later with evaluation, getting resources, etc. These may, however, trickle down into the department - people argue when things aren't going well."

- "Clear division between Dean's office and the rest of the business school adversarial, with few exceptions. But our department is quite tight and well-connected with one another, and with little power struggles."
- "I wish I ACTUALLY knew! Perhaps this approach is too meek, but I think new faculty should focus on their research and teaching, and keep themselves out of political squabbles to the extent it's possible. When you're new, it's unlikely you fully understand what's going on. There's whole history that unfolded before you arrived. Picking sides is rarely productive. Just nod your head, smile, and say, "I see your point about that.""
- "Perhaps even more functional and more clear! Status (respect/admiration) is well aligned with power (decision-making, influence) here."

Hierarchical Dynamics Question 4: "Do you think that you've changed your approach to intradepartmental hierarchical dynamics since entering academia?"



Findings: N = 13. Participants were given 5 options, tallied and shown below.

Hierarchical Dynamics Question 5: "If you answered probably or definitely yes to the above question - how so?" (Free response)

Findings: N = 6. Free response answers were coded but no strong theme emerged.

Notable quotes:

"After working in a hierarchical business environment, it was in my nature to treat my advisors/senior collaborators as my bosses. In some ways, this made me an excellent graduate student - I got everything to them well-done and on time and was very respectful of their time and efforts - but later on, I was bending over backwards to work on co-authors' timelines, taking advice that had bad

outcomes for me, and I realized that I needed to take more control and make my own choices about things that would affect me more than them."

- "I think that there are different goals we can have in this career. Departments that have a shared vision for success are easier to succeed in. Departments with a lot of diversity in views on what "success" in our field means can be harder to navigate."
- "Learning to not step on toes and, at the same time, not take any one opinion too seriously"

Hierarchical Dynamics – Further comments: "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 4. Notable quotes:

- "Certainly, taking a first job where two senior people notoriously hate each other is dangerous. The chances you get caught in the cross fire increase. However, we're all a bunch of independent contractors that sit together in one place occasionally. The importance of links with colleagues really varies from place to place."
- "Hierarchy, politics this is just part of being people. Mindset matters a lot here. Be respectful and kind and thoughtful, and that goes a long way!"
- "One thing I would say just be kind to everybody you interact with on campus whether faculty, staff, or students. A little kindness can go a long way."

Publishing

Publishing Question 1: "Certainly, there is a lot of tacit knowledge surrounding the publication process that is best learned through experience. But, as you've gained experience submitting, revising, and reviewing journal articles, are there any things that stick out as "ah-ha!" moments - things that were different from your previous expectations and that have changed how you write, submit, and revise your research?" (Free response)

Findings: N = 13. Free responses were coded and a few loose themes emerged.

Themes included:

- Keep your writing *clear* and *technical*
- Seek out LOTS of informal/friendly feedback and as early as possible
- What's in the front of the paper is highly important (abstract, first few pages (including who you cite there), keywords, etc.)

Notable or representative quotes:

• "Early in my career, I viewed my academic work as a creative outlet, which is how I think my mentors viewed it. However, I was really slow (as was one of them). I eventually realized (about three years into my first faculty job) that my current approach was untenable."

- "Recent ah-ha! Reviewers seem to respond strongly to signals of effort (perhaps unsurprising knowing what we know from psychology), perhaps even above quality itself. Incorporating new data, being able to point to major rewrites, etc. can be helpful, rather than a more subtle approach. Quality is clearly the major baseline threshold, but once you're beyond that threshold, effort signals can help a lot."
- "My favorite book on writing is for academia is "How to Write a Lot" by Paul Silvia. The basic idea is that we are technical writers, not poets. The biggest barrier to writing and submitting is our own self-inhibition due to fear of criticism."
- "I used to only have a few projects, and that they would increase in importance over time if I didn't get this paper into this journal, how could I get tenure? Writing more (by spending more time with my fingers physically on a keyboard, and less time doing all other things) and having more projects decreases my identification with any one of them. Thus, I'm less worried about getting criticized or rejected on any one paper, which creates a virtuous cycle where I'm less worried about writing and submitting even more of them."

Publishing Question 2: "How has your preparation of a manuscript for initial submission to a journal changed over time, if it has?" (Free response)

Findings: N = 11. Free response answers were coded. The themes were that people generally feel that the process goes more quickly with increasing experience and that they seek feedback earlier in the process than they used to.

Notable or representative quotes:

 "Basically, I have internalized Grant & Pollock's "Setting the Hook" for AMJ. I write hooks and show them to people fast (e.g., write it in 2 hours). I strive to have first drafts that are understandable, not smart or elegant. I try to get feedback from coauthors or colleagues as fast as I can, and have goals for those activities.

Over time, I've found I can put together a decent draft of a paper in about 30 hours. Thus, 2-3 weeks is usually realistic for creating something understandable that I can get feedback on. When people are critical, it often means I am not being clear, not that I need to rethink everything. Thus, revisions are not wholesale throwing away of what I had, but figuring out how to express ideas differently."

• "I have tried to be less of a perfectionist on my initial submission - they are going to find issues to correct in a revision, so no need to spend hours and hours perfecting and word smithing every single sentence when you are going to edit it again anyway."

Publishing – **Further comments:** "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 1. Notable quote:

• "Writing takes practice over time. And when I'm writing on a new project for the first time, it can still feel just as hard as before! ... I use conference deadlines as a major push to get first drafts done."

General Questions

General Question 1: "What were the moment(s) during your PhD when someone said or did something that helped you believe in yourself as a scholar?" (Free response)

Findings: N = 8. Free response answers were coded but no themes emerged.

Notable quotes:

- "Conversations with my advisor not just academic conversations, but mentorship or even personal/friends conversations, talking about life goals and values, etc. Talking about experiences with cohort mates in grad school (not all of them, but an important core!) and then expanding that cohort over time to include students in other programs; these help you learn that your experience is probably what all scholars are experiencing!"
- "I think you really have to believe in yourself and go for it full force, and see how it turns out. I got lots of rejections in grad school and had no idea if I would make it in the field. The final key moments were probably when (a) my first ever project made it into ASQ after 8 years of work and (b) I suddenly went from 3 to 6 publications upon arriving in my tenure track position. It was a very uncertain, long road to the tenure track job but persistence at the end is vital. Once you get your position, even if it isn't at a place your advisors think is perfect for you, it's all worth it it's an amazing job."

General Question 2: "Looking back at your PhD program (a specific time frame or overall), what are you either a) glad you did or b) wish you had done differently (or even just implemented earlier)? In other words, if you could travel back in time, what would you tell your PhD student self?

Your reactions and memories may seem too idiosyncratic to be useful to another student, but don't underestimate the possibility that what you've learned from your experiences could actually be uniquely valuable to someone else." (Free response)

Findings: N = 11. Free response answers were coded and a VERY strong theme that emerged was participants would have told themselves to start projects earlier in the PhD program.

Notable or representative quotes:

- "Get over yourself and write more. You aren't going to change the world with your first paper. Your job is to write papers. Go write. No, not read, not play with your data. Not make a presentation. Not make people think you have cool ideas. Write. Submit."
- "1) Spend more time working on research, and less time worrying about PhD classes/classwork.

2) Work experience is relevant in the classroom...and meaningless in the academic job search process (for the most part). This was a shocking realization for me."

• "a) Showing up and asking for help is important - don't struggle or feel stuck alone!; talking to / learning from more senior students

b) I always felt like I needed an "amazing idea" in order to meet with them, but faculty are often just looking for that enthusiasm and spark from early-year students, and are happy to meet! ... No 1st year

ideas are "amazing", so faculty aren't expecting that anyway! what we're looking for is dedication and enthusiasm."

General Question 3: "What's one expectation you had about being a faculty member that turned out not to be true?" (Free response)

Findings: N = 12. Free response answers were coded and one very prominent theme emerged: Participants expected there to be more time for research once one is a faculty member - instead, teaching and service take FAR more time than expected.

Notable or representative quotes:

- "That with status and freedom come more free time. It's the opposite: you'll never have as much free time as you do as a doctoral student."
- "Teaching and service turned out to be more demanding than I thought. Everyone says to say "no" and I should have taken that more seriously. Also, PhD students who are struggling can really be hard. Don't take on new students lightly."
- "Taking on administrative/leadership roles can be fun! Not just a time suck!"
- "I thought it would be easier to move institutions after publishing a lot, but moving institutions is
 actually really hard for everyone. I'm at a place that values me and has resources, so that is lucky, but I
 would recommend fully investing in your first department/city so that you find yourself with a good life
 there a few years later. I waited too long to get to know other professors on campus and to find things
 in the city that I really liked."
- "I thought it would be more DIFFERENT. In all of the ways. But it's not I still do research (not only on the same topics, but even on the same papers I was working on in grad school!! just further along the revision pipeline now), I talk with cohort mates who are now faculty elsewhere or working in industry, I talk with advisors, I teach more now but it doesn't take up as much time as I thought, I still do readings, I still talk to students and collaborators about ideas...

The main difference has been location... Otherwise, incredibly similar to my experience as a 4th and 5th year doctoral student. I'm an independent scholar, directing my own research, and am deeply interdependent with collaborators, mentors, and others who support that research."

General Question 4: "To what extent have the following things been more vs. less stressful for you since becoming a faculty member? (as compared to during your PhD)

-50 = much LESS stressful since becoming a faculty member

0 = no change in amount of stress related to this since becoming a faculty member

50 = much MORE stressful since becoming a faculty member"

Note: Participants were shown the following 8 items and for each item, given a sliding scale ranging from -50 to 50, with markers in increments of 10. The default position of the slider was at 0.

Items:

Being able to spend quality time with people who are important to you outside of work Coming up with promising research ideas Executing promising research ideas Time and energy management Departmental interpersonal or hierarchical dynamics Taking time for your own needs Maintaining physical health Balancing research with other work-related demands

Findings: N = 13. While responses were pretty idiosyncratic, some loose themes that emerged were:

- "Other Work Demands" were reported as much more stressful once becoming a faculty member, especially the more senior one becomes
- "Maintaining physical health" was reported as a bit more of a stressor, and the same for "Time and energy management"
- "Coming up with promising research ideas" was reported as much less stressful, by a majority

General Questions – Further comments: "Do you have any further detail to add on any of the above questions/answers?" (Free response)

N = 3. Notable quote:

"Really get to know your dissertation chair, you'll be spending plenty of time in their office, so might as well. If things go well, you'll hopefully be working with them for many years in the future. When going to conferences, don't stay with your own group. Force yourself to mingle with other people, get to know them and their research. Don't shy away from smaller conferences either - they're more intimate, and you can get to meet people faster there too.
Enjoy the time to just research - soon you'll also have classes to teach (sometimes more than 1), which end up taking more of your time than you want.
Figure out a way for you to get stuff done - I personally use a pen/paper planner where I can make my to do lists, deadlines, etc. Started doing that in my doc program, and still do that today.

Finally, the faculty paycheck is MUCH better than a PhD paycheck! :)"

Appendix

A.1 Professional Development Workshop (PDW) Overview

Title: Round 2 – Peer Mentorship and Professional Development for Organizational Behavior Ph.D. Students

Organizer: Karren Knowlton, *The Wharton School, U. of Pennsylvania* Organizer: Jasmine M. Huang, *Washington U. in St. Louis* Organizer: Elizabeth Luckman, *Washington U. in St. Louis*

Mentorship is critical to the development of Ph.D. students as they journey through their academic programs. Further, some of the most effective and rewarding mentorship can come from peers at the varying levels of Ph.D. programs. Yet, because of the structure and nature of Ph.D. programs and academic departments (small cohorts, political navigation), creating the conditions for optimal peer mentorship is often difficult. We aim to change that. At the Academy of Management Annual Meeting, 2017, we held a similar version of this workshop with a terrific turnout (over 25 OB Ph.D. students from a wide array of universities) and a high level of engagement. This year, the purpose of this Professional Development Workshop is twofold. First, we will provide an in-person setting for small group discussion and reflection on "table topics" relevant to life as an OB doctoral student (such as hierarchical dynamics, research identity, and goal setting). Second, we will present a compilation of advice that we will collect anonymously from OB junior faculty members prior to the conference. We use this to lead participants through a discussion on how we can best incorporate this information into our growth as OB scholars. These two components of the PDW will serve as an in- person manifestation of the online resource of peer support and information that we are creating and that will soon be available – phdlighthouse.com.

A.2 Goal Setting Question 1: Ranking Items (Full List)

Goal Setting Question 1: Many of the activities that PhD students spend their time on are mutually reinforcing toward the larger goal of becoming a productive and insightful scholar and professor, yet there are undeniable tradeoffs in how students choose to focus their time and energy.

Please rank the following activities according to those that you believe will produce the most value in leading you toward this larger goal (1=most valuable; 17=least valuable, but not necessarily zero value):

- Working with faculty on research drafting/writing
- Working with faculty on research brainstorming/bouncing ideas
- Working with faculty on research study design
- Working with faculty on research data collection and/or analysis
- Presenting research at conferences
- Attending conferences (non-presenting activities)
- Reviewing conference or journal submissions
- Program requirements required classes (reading and deliverables)
- Program requirements elective classes (reading and deliverables)

- Program requirements comprehensive or qualifying exams
- Program requirements teaching or TAing
- Program requirements mid-program paper
- Program requirements dissertation
- Research activities with other doctoral students
- Program-related social activities
- Personal reading
- Non-research, non-program related activities (hobbies, volunteering, socializing, family time, etc.)