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# How to Publish While in the Doctoral Program? Managing Research Projects

by Varun Grover, Feature Editor, Clemson University

often see doctoral students feeling overwhelmed with their workload. This includes not only the coursework requirements in their first couple of years, but the added pressure to take on projects that can result in possible publication. While small conference papers offer good experiences for students, the real challenge is to publish journal articles before the recruiting process ensues. Such a pressure to publish while in the doctoral program is exacerbated in a tough job market. After all, for research schools that hire, a major filter on the vitas is whether the candidate can publish. What is better than demonstrable publications—particularly in premier outlets. So, students take on projects and are expected to make progress on them, while dealing with seminar requirements, comprehensive exams, the dissertation, teaching or even the tedious job search process. Squeezing out time for extracurricular projects that may be bigger than the curricular projects can lead to feelings of overload and stress.

So, how can a doctoral student get publications while dealing with the challenges of their program? Of course, there is no simple panacea to this. Publications require not only the hard work of doing good research, but also a bit of luck in getting articles accepted in the timeframe of four years, the typical doctoral program duration. This creates a practical problem. It is unusual to have a student start a project in year one. In years two and three, perhaps a major project can be completed with a highly motivated student and a good faculty advisor. This means that if the paper is submitted in year three, it is very unlikely to get accepted before that candidate interviews for a job (typically at the beginning of year four). For major journals, the average submission-to-acceptance cycle is 18 months—which makes the probability of getting a top journal paper accepted by the time a student interviews almost zero. So, how can we increase these abysmal odds and lower the degree of stress?

I see three ways in which a doctoral student can *manage* their research projects: Create Synergy, Research Incrementally, and Manage Portfolio. With careful management, a student can try to cultivate a more efficient research program as well as use of time.

## **Create Synergy**

This is easier said than done. However, astute students try to leverage their various pedagogical opportunities in a doctoral program in a synergistic manner. This indicates that a conscious attempt should be made to leverage previous experiences. If a student has invested time and energy in a research topic for a seminar, then can the next project in another seminar or with a faculty member build on the same literature base, framework, model or methodology? In some cases, this is not desirable, particularly if the student concludes that the topic was not of interest. However, in most instances, with conscious thought given to synergy, considerable investment in start-up costs in reading literature or learning statistical tools can be reduced. Further, there is the possibility of systematically building a program of research that can serve as the groundwork for the dissertation.



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One of the most successful students I had, identified an area of research and structured a research program around three theoretical perspectives in the first year of the doctoral program. This framing then formed the basis of three papers that were conducted as part of two seminars and an independent study. The student submitted these papers to journals at the beginning of the third year, and had two acceptances and a revision (in good outlets) by the time the job interview process came around. Further, the dissertation "topic search" time was greatly reduced, as the student was deeply versed in the dissertation area already. In such a case, the on-campus presentations, which are instrumental in the job interview process, could be structured extremely welldemonstrating a thematic program with successful publications on the way, a welladvanced dissertation, and extensions that were more than talking points due to demonstrable past successes. Sounds too idealistic? Perhaps—and somewhat rare. Students often don't have the perspective or a schema of their field (see "Considerations for Building a Schema of the Field During Doctoral Study," Decision Line, July, 2011) to identify synergies across their projects. Therefore, establishing a schema of the field through a seminar or otherwise in the first year, can be critical to facilitating the synergy approach. Striving for such synergies, of course, can increase the probability of publications during the program and reduce dissipated energyand, therefore, stress! If on the other hand, if students go through the program in a reactive mode, without "taking charge" of their research agenda, they will end up doing things that are convenient, practical, or expected—and end up with a portfolio of half-finished, piecemeal projects that serve no one any good.

**Recommendation:** Doctoral students should minimize dissipation of unfruitful energy by creating synergy across pedagogical opportunities for research.

# **Research Incrementally**

In building a research portfolio during the doctoral program (as well as in the broader career), a student can follow a number of approaches. I can put them in three major categories: incrementalist, innovator, and opportunist.

The first, incrementalist, is a conservative approach where students build on research areas based on incremental extensions of existing literature or their own work. This approach allows the student to draw from a well-established (and often structured) literature base or theoretical lens, and extend existing work. While the practical question of "so what" does the research do for practice must be kept in mind, opportunities

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can be forged by assessing gaps in the literature and studying "future research" sections of existing work. The resulting project is rarely going to be groundbreaking (by definition). However, it can be an important and competent piece of research that can gain traction in a good journal.

The "innovator" tends to look for research opportunities on the fringes of the discipline. Typically, the phenomena or area lacks a clear theoretical basis or a structure, which needs to be forged. Of course, this is attractive as the innovator typically works in blue oceans where there is limited competition—but the heavy lifting of creating structure and value without strong anchor points needs to be conducted. Any resulting paper is a risky proposition as there could be a range of outcomes. It could potentially set the stage for a new research agenda or could be too radical to evaluate.

Finally, the "opportunist" focuses less on the research area itself, and more on the opportunity to get a project going that might result in a publication. The student might "join" when invited on a variety of different projects that may or may not have synergy. Such a "scattered" portfolio may not look good on a vita. However, opportunists do have expo-

sure to a variety of different areas, and could possibly have a higher incidence of publications. Even here, to sustain such an approach, the opportunist must bring value to the table in order to continue being invited to future opportunities.

In reality, researchers might follow a mix of these approaches. Some might be largely incremental, with a pet innovative project and perhaps a couple of opportunistic ones. For doctoral students, I would recommend that they take a more conservative approach with a higher incidence of incremental projects. However, doctoral students tend to be very ambitious. I see my role as an advisor, largely to ensure that the appropriate tradeoffs between feasibility and publishability are maintained. An incremental approach during doctoral study can allow students to build on existing work rather than dealing with wicked problems and lack of structure in a new arena. It is easier and can quickly set the parameters for bounding the research problem and the methodology. Further, I believe journals, particularly top journals, tend to be conservative, and would rather see work that extends existing literature than try to assess "groundbreaking" work with unclear benchmarks. I would hasten to add that while I believe in pushing novel ideas, students should work in the incremental mode in the more malleable learning stages of their career. Later, they can break out and do the work that can truly make a difference.

**Recommendation:** Doctoral students should follow an primarily incrementalist approach to building their research in order to conduct important and competent work that can be published.

## **Manage Portfolio**

While the above approach is important for building a research portfolio, often students feel overwhelmed with their load and mix of projects. These may or may not have been well orchestrated, but they are all demanding significant time. In many cases, students have simply taken on more than they can ef-

fectively deal with. As a consequence, they keep getting pushed on projects where co-authors have vested interests, moving from one project to anotherwithout assessing holistically what is important and how they are progressing. I would advise students to take a portfolio approach to their research projects, by "managing" them by periodically rebalancing their portfolio. A simple tool is illustrated in Figure 1. Here, students (or any researcher for that matter) can map their individual projects into the 2 X 2 grid. The two columns represent a careful assessment of whether the student thinks that the project is one that will have a "low impact" or a "high impact." Impact can be gauged subjectively in terms of current excitement in the project, its importance in practice, and publication potential in a desirable journal. The two rows represent the completion timeframe for the project. This too is subjective, given the student's stage in the program. Short term could be in the order of months, while long term could be in the order of years.

Projects that fall in the top-right grid with high impact and can be completed (from their current state) in a short time-frame are clearly "Winners" and need to be set at the highest priority. These are papers that can be targeted at the better journals and give the student the best chance of publications while in the doctoral program. The high timeframe and low impact papers in the lower-left grid are "Losers" and should be put away in a drawer. The high impact and long time-frame projects in the bottom-right grid are "Stars." These projects should

be nurtured with continuous investment in ongoing milestones. Such projects often require intensive time-consuming methods or significant structural considerations. In some cases, they may be put on hold until after the doctoral program. However, their high impact potential makes it important to retain and invest in these projects. Finally, projects that are low-impact and short timeframe are "Back-burners." Time should be invested in these projects if there are gaps between other commitments (i.e., after completing a major project, before going onto another major project, something in this grid could fill the gap). These projects will typically yield lower quality publications but can be useful in gaining experience at a workshop or a conference. The student may want to get these out, if they need publications on the vita. Occasionally, feedback at a conference could propel these papers into a higher impact grid. Alternatively, brainstorming ways to move these projects to the higher impact grid (without inordinate addition in time investment) would be prudent.

It should be noted that students should reassess their portfolio every few months. It is entirely possible that the subjective assessment of impact might change, particularly as projects get dated and the student loses interest. Some stars might progress to winners (as they make good progress); back burners to winners (as they are reconfigured); winners to back burners (as the excitement around the topic diminishes or the research gets preempted); winners to stars (as the time commitments are reassessed). The rebalancing helps students re-examine their priorities so they

can invest their limited time in winners that have the maximum potential of yielding publications while the student is in the doctoral program.

**Recommendation:** Students should periodically assess and rebalance their portfolio of research projects so that "winners" are identified, and nurtured into successful publications and "Losers" are weeded out.

In addition to these recommendations, there are a few other things that come to mind as students begin their doctoral journey. While in the first year, typically students lack visualization of their field and idiosyncrasies of research content and process. Therefore, students should seek guidance from faculty rather than "going on their own." Typically, students who try to develop their own research before they are ready, tend to be overly ambitious and quickly get frustrated. Faculty guidance very early in the process can help them understand their field and its connections. Also, in year one, it is useful for students to meddle around with data sets, so they get comfortable with how to deal with data and increase their sense of self efficacy as researchers. As they read papers, they can refine their schema as well as start building a file of research ideas. These steps can greatly facilitate the ability to follow the recommendations in this essay.

So, in conclusion, to the doctoral student who is coping with a heavy workload in the program and feeling the pressure to begin other projects that can yield commensurate publications, I would say take the time to manage your projects with a bit of higher level thinking. Creating synergy can make your time investment more efficient. Researching incrementally can efficiently bound your project domain and methodology and reduce your risk. Finally, frequently reassessing your portfolio of projects can help prioritize and assess what is important to focus energy on. No one said doctoral life is easy—but by being a bit proactive, a student can make it a tad less stressful. ■

### LOW IMPACT HIGH IMPACT

Short time frame	back burner	winner
Long time frame	loser	star

Figure 1. Managing the portfolio of research projects