

# Good for the Goose, Bad for the Gander? A Critical Look at the Traditional Graduate Training Paradigm

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Welcome to graduate school! Now get to work and publish something, would you?” Although graduate students may have never heard this phrase explicitly, it is not difficult to infer this message from faculty members in their program, other graduate students, and the field in general. From the time students begin a graduate program, they are pressured to conduct studies and publish early and often, in the hope that top-tier journal publications will best strengthen one’s CV. This view of what constitutes a successful graduate student predominates the field. PhD programs seek to ensure that their students achieve these goals, but are these individual goals also good for the field at large?

There are pros and cons to this typical graduate training paradigm for both the individual and for the field. First, let’s take a look at some of the potential disadvantages associated with the usual scholar-training methods.

## **Beginning Research Early Benefits the Student, Not the Field**

To ensure success on the job market, a graduate student must research, write, and publish multiple articles before graduation. In a past edition of the *Observer*, Valla (2010) showed that, across subdisciplines of psychology, graduate students hired directly to a professorship tended to have between eight and nine publications at the time of hire. Of these publications, about four were first-authored papers, and one was in a top-tier journal (e.g., *Nature* or *Psychological Science*). Thus, graduate students who aspire to academic positions need to start publishing early in their graduate school careers to be able to meet these expectations, even though these early publications may not be at the same caliber as those published later in one’s career.

It is in the best interest of the field of psychology that its researchers — whether faculty or graduate students — do work that is novel and creative and that advances science. One could argue that it is overly optimistic, even naïve, to believe that graduate students can truly contribute to the advancement of psychology so early in their research careers. To envision and implement original research takes considerable time (a couple years at least); one must become immersed in the literature of one’s subfield and be able to identify the unanswered questions that remain. It is unlikely that the work of young graduate students will reflect these qualities. Often, students are encouraged to do some project, any project, write it up, and submit it to a journal, regardless of the quality of the product. Although the prospect of a potential publication may benefit the graduate student, what are the chances that this work is creative and novel enough to truly advance our theoretical understanding of some psychological phenomenon? This is certainly not to discount the time and energy of graduate students, nor to negate the possibility that they *can* publish great research, but rather to propose that the interests of graduate students and the field of psychology may not be entirely compatible.

Great research is borne out of extensive knowledge of the literature of one’s field, though one should

also be well read in other major areas of psychology (and even other areas of academia). This knowledge, however, requires a considerable investment of time, perhaps at the expense of starting a research project and thereby beginning the road to publication. The payoff is that it fosters a disciplined research approach — solid theoretical rationale for aims and hypotheses *prior* to research design and project implementation — that ought to produce great research that is multidisciplinary, rigorous, addresses unanswered questions, and advances the science of psychology. The opposite — hastily beginning a project prior to understanding past literature and theory — could lead to research that is unoriginal, fails to be theory-driven, and contains inappropriate statistical analyses and erroneous conclusions. Unfortunately, the relatively short duration of graduate school and the demands of publication usually pressure students to publish early and often; consequently, students may approach research in a manner that is antithetical to fostering a great research mind.

Despite the support for this side of the argument, it is also important to recognize the benefits associated with the converse approach. Training graduate students by having them immediately begin producing research comes with its own set of advantages.

### **Learning by Doing Effectively Trains Effective Scholars**

Training effective scholars is an undeniably good thing for the field. Yet how should programs do this? For the most part, contemporary programs have their graduate students begin research almost immediately, believing that engaging in research directly should make one a better researcher and a more valuable asset to the field. Clearly, one effective way of learning is through doing. If you're attempting to learn Spanish, reading the textbook will only get you so far. You should find someone else who speaks the language and have a conversation with him or her. This learning-by-doing approach should apply to research as well. The work of Roediger and Butler (2011) supports this claim, reporting that the testing effect demonstrates that effortfully retrieving information from memory is an effective learning strategy. In addition, Slamecka and Graf (1978) found that participants who generated their own list of words demonstrated better recall, recognition, and confidence in the material when compared to participants who simply read words presented to them. Thus, the data seem to show that being an active agent, rather than a passive recipient of knowledge, is the better learning strategy. Accordingly, the hands-on experience of young graduate student researchers may help ensure that they become the valuable, self-sufficient researchers the field needs.

### **Both the Field and the Individual are Benefited by Concrete Contributions**

Despite the dangers of producing substandard work, the field and the student can benefit from any project conducted. A piece of research, even if poorly produced, has the potential to advance the field. If a project is poorly designed, unoriginal, or fails to answer any important questions, this will be soon be apparent to other researchers, who will subsequently give it less attention, and eventually to the student, who will likely correct these mistakes in future work. Even a poor published project might help generate additional research, more finely illuminating better conclusions. Finally, the badly designed project can help to prevent others from making the same mistakes. Regardless, at this early stage, the most important thing for graduate students (and for the field) is that they learn, and this learning will happen quite independent of the quality of the first project.

Clearly, both sides of this argument have merit, and more discussion and critical evaluation of this practice is needed. Are PhD training programs currently structured in ways that maximize benefits to the field as well as to individual researchers? The answer to this question is not obvious, and we do not claim to have an ideal method with which to investigate. However, these kinds of roadblocks do not seem to deter us from figuring out the complexities of human behavior, so why should we let them prevent us from maximizing our own efficiency? If psychology wishes to retain its prominent position as a “hub science,” it would be wise to consider these issues, as the field is only as strong as the way in which its scholars are trained.