

# On Critical Thinking [in Psychology]

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What does it mean to think critically in psychology? I like the following broad definition: *The propensity and skills to engage in activity with reflective skepticism focused on deciding what to believe or do.*

Students often arrive at their first introductory [psychology] course with what they believe is a thorough grasp of how life works. After all, they have been alive for at least 18 years, have witnessed their fair shares of crisis, joy, and tragedy, and have successfully navigated their way in to your classroom.

These students have had a lot of time to develop their own personal theories about how the world works and most are quite satisfied with the results. They often pride themselves on how good they are with people as well as how astute they are in understanding and explaining the motives of others. And they think they know what psychology is. Many are surprised - and sometimes disappointed - to discover that psychology is a science, and the rigor of psychological research is a shock. The breadth and depth of psychology feel daunting. Regardless of their sophistication in the discipline, students often are armed with a single strategy to survive the experience: Memorize the book and hope it works out on the exam.

Therefore, student exposure to critical thinking skill development may be more accidental than planful on the part of most teachers. Collaboration in my department and with other colleagues over the years has persuaded me that we need to approach critical thinking skills in a purposeful, systematic, and developmental manner from the introductory course through the capstone experience. I propose that we need to teach critical thinking skills in three domains of psychology: practical, methodological (testing scientific ideas), and theoretical (developing scientific explanations for behavior).

## **Practical Domain**

Practical critical thinking is often expressed as a long-term, implicit goal of teachers of psychology, even though they may not spend much academic time teaching how to transfer critical thinking skills to make students wise consumers, more careful judges of character, or more cautious interpreters of behavior. Accurate appraisal of behavior is essential, yet few teachers invest time in helping students understand how vulnerable their own interpretations are to error. However, as students acquire a good understanding of scientific procedures, effective [experimental] control techniques, and legitimate forms of evidence, they may be less likely to fall victim to the multitude of off-base claims about behavior that confront us all. (How many Elvis sightings can be valid in one year?)

## **Methodological Domain**

Most departments offer opportunities for students to develop their methodological critical thinking abilities by applying different research methods in psychology. Beginning students must first learn what the scientific method entails. ... The next methodological critical thinking goals include evaluating the quality of existing research design and challenging the conclusions of research findings. Students may need to feel empowered by the teacher to overcome the reverence they sometimes demonstrate for anything in print, including their textbooks. Asking students to do a critical analysis on a fairly sophisticated design may simply be too big a leap for them to make. They are likely to fare better if given examples of bad design so they can build their critical abilities and confidence in order to tackle more sophisticated designs.

Asking students to conduct their own independent research, whether a comprehensive survey on parental attitudes or a naturalistic study of museum patrons' behavior prompts students to integrate their critical thinking skills. In evaluating their work I have found it helpful to ask students to identify the strengths and weaknesses of their own work - as an additional opportunity to think critically - before giving them my feedback.

### **Theoretical Domain**

Theoretical critical thinking involves helping the student develop an appreciation for scientific explanations of behavior. This means learning not just the content of psychology but how and why psychology is organized into concepts, principles, laws, and theories. Developing theoretical skills begins in the introductory course where the primary critical thinking objective is *understanding and applying concepts* appropriately. Mid-level courses in the major require more sophistication, moving students beyond application of concepts and principles to *learning and applying theories*. Capstone, honors, and graduate courses go beyond theory evaluation to encourage students to *create theory*. Students select a complex question about behavior and develop their own theory-based explanations for the behavior. This challenge requires them to synthesize and integrate existing theory as well as devise new insights into the behavior.