

**Gray Matters: Understanding Academic Researchers' Decisions About
Commercializing Their Ideas and Discoveries**

by

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ABSTRACT

With an imbalance of attention paid to faculty researchers and their essential role in knowledge transfer, this study focuses the cognitive underpinnings of decisions that individual researchers make about positioning their scholarly work to permit or encourage commercialization. Informed by biographic narrative interviews and the extant literature, this dissertation advances a model based on Ajzen's (1988, 1991) Theory of Planned Behavior (TpB) to address: *Why, and under what conditions, do some faculty researchers, and not others, exploit opportunities related to their scholarship?*

Recognizing that faculty researchers do not choose research streams based upon commercial potential, the model focuses on precursors to entrepreneurial intentions (attitude, perceived behavioral control, subjective norms) in the context of university settings. Internal motivation factors, network factors, and perceptions of the environment are considered in predicting whether a faculty researcher engages in commercialization behavior. Using path analysis, the study tests the model with a sample of faculty researchers affiliated with universities and medical schools in New York State (n=304).

As expected, intention to engage in commercialization behaviors showed a direct, positive effect on actual behaviors. The effects of risk propensity, sense of obligation, value importance of money, and affect based on knowledge of the entrepreneurial role were mediated by attitude in their effects on intentions and subsequent commercialization behaviors by faculty researchers. In addition, risk propensity had a direct, positive effect on intentions. The subjective norms of a faculty researcher's professional community also influenced intentions, as expected. Results are inconsistent with the TpB's emphasis on perceived behavioral control, which showed neither an effect on intentions nor on actual behavior. Likewise, institutional subjective norms did not significantly affect intentions. Results also suggest direct, positive relationships outside of the intentions framework between both industry experience and access to resources through social networks and commercialization behavior.

Research from the perspective of entrepreneurial cognition can inform both the special case of academic entrepreneurship as well as discussions between faculty researchers and university administrators regarding commercial knowledge transfer.