

## An fMRI Analysis of Financial Literacy Assessment

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### Abstract

This paper examines the effect of Certified Financial Planner<sup>®</sup> (CFP<sup>®</sup>) certification on the neural activation of participants in an advisor-intermediated stock market game using functional magnetic resonance imaging (fMRI). Brain activations were greater in regions associated with continued decision-making and error detection when employing an underperforming non-CFP<sup>®</sup> advisor as compared with an underperforming CFP<sup>®</sup> advisor. This greater activation may reflect greater uncertainty or “second guessing” associated with the use of a non-CFP<sup>®</sup> advisor during periods of underperformance. In contrast, when advisors outperformed the overall market, there were no significant differences in brain activations when using CFP<sup>®</sup> or non-CFP<sup>®</sup> advisors. In this experiment, the CFP<sup>®</sup> mark generated observable behavioral and neurological differences in participant decisions to retain an investment advisor during underperformance. To the extent that maintaining a consistent investment strategy during inevitable market fluctuations is a desirable goal, the behavioral and neurological impact of a designation of expertise such as the CFP<sup>®</sup> may benefit consumers by engendering relatively greater confidence during temporary periods of underperformance.

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