The study tested the linkage between research and development (R&D) and company performance by implementing a meta-analysis. Meta-analysis is a quantitative method that statistically integrates, analyzes, and interprets multiple empirical studies on a phenomenon. With a combined sample size of 8801 from 27 independent studies, this study reconciled previous findings, identified factors that may potentially moderate the relationship, and pointed to several future research directions.

We found that R&D is statistically and significantly positively associated with company performance with a correlation coefficient of .20 at a .001 significance level. A number of factors were explored to pinpoint the nature of the relationship between R&D and performance. We found that R&D related to different types of performance measurement in different ways. Our data also suggest that the level of R&D intensity may be a potential moderator of the relationship. In addition, R&D intensity, diversification, ROA, net sales growth, and market share were found to have a positive differential effect on the relationship between R&D and performance. The result indicates that different industries have different levels of R&D payoff. The data support that medium sized firms enjoy higher R&D payoff than both smaller and larger firms. Our results also show that the overall R&D payoffs have increased overtime.

To the best of our knowledge, this is the first attempt to meta-analyze the relationship between R&D and performance. Meta-analysis is a useful tool to integrate multiple independent studies. It reconciles inconsistent empirical results and forms a unified view of a relationship. Organizations and researchers can benefit from this study in a number of ways. The analysis suggests that innovation through R&D has become increasingly important for companies’ sustainable competitive advantage overtime. The data also suggest that although R&D is not positively related to profitability in the short term, its value is absorbed by the capital market and is reflected on the increased market value. In addition, the analysis of moderation effects suggests that organizations should carefully consider their positions in R&D intensity, diversification, ROA, net sales growth, and market share to minimize the risk and maximize the return of R&D investment. Finally, the study informs researchers by providing a platform for future studies tailored at the firm level.