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Choosing between the Regression Correlation, the Rank Correlation, and the Correlation Curve

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Abstract : This paper presents a rank correlation curve. The traditional correlation coefficient is valid for both continuous variables and for integer variables using rank statistics. Since the correlation coefficient has already been established in rank statistics by Spearman, such a calculation can be extended to the correlation curve. This paper presents two survey questions. The survey collected non-continuous variables. We will show weak to moderate correlation. Obviously, one question has a negative effect on the other. A review of the qualitative literature can answer which question and why. The rank correlation curve shows which collection of responses has a positive slope and which collection of responses has a negative slope. Such information is unavailable from the flat, "first-glance" correlation statistics.

Keywords: Bayesian estimation, regression model, rank statistics, correlation, correlation curve

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