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Introduction

• Quantitative skills are essential for successful completion of the finance component of the Bachelor of Business Administration (BBA) program.
• Preliminary assessment indicates that Haworth College of Business students may lack prerequisite algebra skills.
• Non-cognitive factors, such as attitudes toward math, appear to impact math performance.
• This study assesses the quantitative skills of BBA students, identifying areas of greatest concern, and provides recommendations for corrective action.

Preliminary Results

• The sample includes 164 undergraduates, which demonstrate significantly greater quantitative skill than the average Haworth College of Business student (i.e., ACT math, GPA, math prerequisites).
• Nevertheless, these participants scored poorly on the FIN 3100 prerequisite quantitative assessment ($M_{correct} = 2.8, SD = 1.8$).

Data was collected in three parts:
• On the first day of class (FIN 3100) participants completed the short Attitudes Toward Mathematics Inventory (ATMI) scale and five open-ended questions related to math (see handout).
• After a short break, participants completed a 10 question math quiz covering BBA prerequisite skills.
• WMU Office of Institutional Research extracted academic and demographic data for HCoB students.

Determinants

\[ Q_i = ACT_i + \sum_{j=1}^{N} Grades_{i,j} + \sum_{j=1}^{N} Time_{i,j} + \sum_{k=1}^{N} Demographics_{i,j} + \sum_{h=1}^{N} ATMI_{i,h} + \varepsilon_i \]

• Math ACT and attitude towards math both show a significant positive relationship with performance.
• Open-ended responses involving “work” words show positive correlation with performance, “money” words are negatively correlated.
• Participants exhibit stronger quantitative skills than the average HCoB student, yet are substantially underprepared for the quantitative requirements of finance.
• Underdeveloped math skills are a systematic issue requiring an institutional response.

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