

# An Investigation of the Relationship between Personality Traits and Performance for Engineering and Architectural Professionals Providing Design Services to the Building Sector of the Construction Industry

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(ABSTRACT)

One of the prominent trends in business organizations today is the attention placed on individual personality traits to predict job performance. Distinct personality characteristics of members of various work groups must be carefully considered so that the assignment of individuals to work teams results in successful behaviors and performance improvements. The particular task assignment to various work groups, and thus assignments to individuals, will affect performance. It is critical that these individuals possess both the abilities and behavioral preferences to create conditions that promote the highest probability for success. Contingent variables will always be present in any decision-based action, particularly in complex situations, however, when an individual holds a native preference for a successful pattern of behaviors in a certain task's realm, higher overall organizational performance may be expected. As such, the current study investigates the impact of various personality traits and patterns on critical success behaviors in the Engineering and Architectural profession's project design services. The four project service categories measured in the Critical Success Factors Questionnaire are: Planning (Conceptual Design), Design (Contract Documents), Construction (Administration) and Firm Management duties. The measurement of the individual personalities is accomplished in this investigation through the Myers-Briggs Type

Indicator ® (MBTI). This psychometric instrument measures one's attitudes in dealing with the outside world, as well as one's preferences for data collection and decision making.

On an individual basis, it was predicted that persons with personalities whose preferences were towards openness to new ideas, and resistant to closure of the discovery process, would perform well on planning or conceptual design tasks. It was predicted that those with a preference towards compliance with rules, regulations and thorough adherence to established standards, would outperform on tasks of detailed design. The research work also offered a prediction of high performance from persons with a preference for innovative ideas and openness to alternatives in the administration of construction, and predicted a contrast with personalities that vary from this pattern.

Of the 85-person sample, it was found that those possessing a preference for Intuitive data collection (MBTI Dichotomy, N) and Perceiving structure, (MBTI Dichotomy, P), outperformed individuals with preferences for Sensing and Judging, (MBTI Dichotomies S and J), in both Planning and Construction Administration. However, professionals with a personality favoring Judging, outperformed in the duties associated with the Design Phase. Contrary to predictions, the decision processes captured in the Thinking/Feeling MBTI® dichotomy (MBTI, T/F) did not mediate the performance in any of the four service categories.

The results of the Research indicate a greater utility for personality measures as a diagnostic tool for team and individual performance interventions, rather than a tool for team selection or team-building. The implications of the results of this research, and recommendations for future investigations are discussed.