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An Insight to Project Manager Personality Traits

Improving Team Project Outcomes

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Individual personality assessments tools have a strong following among Fortune 100 companies.[1] Besides being used for hiring purposes, individual personality assessment tools give project managers insight into personality and aspirations, as well as how they process and organize information, make decisions, and interact with team members and other stakeholders. The aim of this research study was to explore what personality traits project managers need to lead a project team effectively. To accomplish this, we employed the Big Five Personality® and the

Myers-Briggs (MBTI®) personality assessments to identify favorable personality traits and characteristics when managing projects. A convenient sample of 202 managers engaged in an advanced project management educational program, responded to the Big Five Personality® and the Myers-Briggs (MBTI®) personality assessments. Thus, the results of this quantitative study can be used by companies when hiring, assigning project managers, and for team building to achieve business success.

Introduction

Fierce competition in the global economy has triggered companies to become more and more dependent on project management to build new products and services faster than ever before; as a result, project management processes and techniques have to be improved and updated regularly.[2] [3] Additionally, project management is expected to include all trades and become more elaborate and diversified in the near future.[4] As such, project managers have been held even more accountable for achieving despite the constraints of a project: time, scope, cost, quality, resources, and risk.[5] [6] [7] To meet these demands, project managers must have a comprehensive understanding of how to apply and integrate the processes as well as how to select tools and techniques sufficient for project success.

However, it takes more than knowledge and performance; it also takes interpersonal skills.[8] Therefore, project managers must possess interpersonal skills along with technical management skills to achieve the project's time, scope, cost, and quality objectives.[9] Mapue reported that a project manager's interpersonal skills are just as essential to a project's success as their technical skills.[10] Such skills include the leadership and personality traits essential for influencing key stakeholders and motivating project team members.[11] For example, when a manager is assigned to a project, he or she can use the PMBOK as a guide to managing the project,[12] but when the project manager has to facilitate a possible contentious meeting with difficult stakeholders or deal with conflict, there is not a guide because meetings or conflicts will differ.[13]

Understanding personality traits will, to a great extent, assist especially with stakeholders who are domineering and authoritative with others who then may feel undermined and disrespected.[14] Therefore, the project manager should have a solid understanding of the different personalities attending the meeting or involved with the conflict to successfully lead the project to success.[15] Studies have shown a direct correlation between a project manager's personality traits and a successfully delivered project.[16] Far too often, when project managers do not possess proper interpersonal skills, or when they take these skills for granted, they soon find themselves associated with project failure related to people issues because of inappropriate leadership style and/or personality.[17] [18] Therefore, it is essential to have project managers with the proper interpersonal skills leading projects to success and, as a result, growing the business.[19] [20] About 80 percent of Fortune 100 companies rely on personality assessments to build stronger, more effective project management teams and healthier organizations. Thus, it should not come as a surprise when these companies report a positive return on investment (ROI).[21]

In a project team context, there are several personalities and behavioral assessment tools available to help better understand the personalities of project managers and their team members.[22] One of them is the Big Five Personality[®] assessment, named by Lewis Goldberg, a researcher at the Oregon Research Institute, now generally used in business and psychological research. The second is the Myers-Briggs Type Indicator (MBTI[®]) personality assessment.[23] The aim of this research study was to discuss the results of an empirical investigation on the Big Five Personality[®] and MBTI[®] assessments and find which project manager personality traits are needed to lead a project team successfully.

The Big Five Personality[®] assessment is categorized in one of the five dimensions described as follows:

- Surgency includes traits of extraversion, dominance, and high energy with determination to get the goal, or task completed;
- Openness to Experience includes flexibility, intelligence, and internal locus of control creativity, and willingness to consider new ideas;

- Agreeableness includes traits of sociability and emotional intelligence;
- Conscientiousness includes traits dependability, persistent, and integrity, goal-directed behaviors;
- Adjustment includes traits of emotional stability and self-confidence.[24]

The Myers-Briggs® type indicator is the most widely used personality inventory in the world, with more than 3.5 million assessments administered each year.[25] It is based on the Jungian categorization of people into one of sixteen personality types in four dichotomous categories.[26] The result is a four-letter “code” that reveals how the person best processes information and interacts with others. The four categories are described as follows:

- Extraversion (E) vs. Introversion (I): While *extraverts* derive energy from social situations and are characterized as “outward,” *introverts* derive energy from being alone to reflect and can be called “inward.”
- Sensing (S) vs. Intuition (N): While people characterized as *sensing* make decisions from empirically gathered information, *intuitive* individuals are more comfortable relying on impressions or hunches.
- Thinking (T) vs. Feeling (F): While people characterized as *thinking* prefer hard data, those labeled as *feeling* are typically impacted by emotion when making decisions.
- Judging (J) vs. Perceiving (P): Those who exhibit a *judging* preference tend to thrive when things are organized and well planned; in contrast, those described as *perceiving* are open to spontaneity.[27]

Methodology

The present study’s three research questions are as follows:

1. What do managers attending an advanced project management educational program report as their Big Five Personality® and MBTI® personality classifications?
2. Are the managers’ Big Five Personality® and MBTI® classification scores in alignment?
3. What do the Big Five Personality® and MBTI® classification score findings say about the personality characteristics of managers attending a program regarding their current capability to lead a project team successfully?

Data Collection

Sample Characteristics

Our research study was conducted as part of an advanced project management educational program at a large-sized university with campuses in the United States and several international locations. Based on their experience with managing projects, 204 managers responded to the Big Five Personality® and the MBTI® personality assessments, both globally recognized personality assessment tools used in educational and business settings.[28] The participants were managers working on projects in a variety of industries and organizations. Included were 137 males and 67 females.

Data Analysis Method

The data evaluated included descriptive statistics, ranking, and comparison of ranks between Big Five Personality® and MBTI® data.

Research Results

Table 1 displays the frequency scores of the Big Five Personality® results of the managers surveyed.

Table 1: *Big Five Personality® category frequency scores*

Mirrored in the Big Five Personality® dimensions, the most reported Big Five Personality® traits from our study fell into the “Conscientiousness” dimension. These managers are dependable, persistent, self-disciplined, and have an integrity trait, which demonstrates an awareness of the impact that their behavior has on those around them. They are generally more goal-oriented in their motives, ambitious in their academic efforts and at work, and feel more comfortable when they are well prepared and organized.[29] Research has shown that managers who rate themselves high on self-discipline are more likely to set authentic goals.[30]

Category	Frequency
Conscientious	92
Openness to Experience	17
Surgency	17
Adjustment	16
Agreeableness	8
Composite	50

Table 2 displays the frequency scores of the MBTI® results of the managers surveyed.

Table 2: *MBTI® category frequency scores*

Personality Type	N	Personality Type	N	MBTI Dimension	N
ISTJ	39	ENFJ	10	Introverted (I)	122
INTJ	26	ENTP	9	Extroverted (E)	82
ENTJ	20	ISFP	7	Sensing (S)	109
ISTP	17	ENFP	7	Intuitive (N)	95
ESTP	14	INFJ	5	Thinking (T)	152
ESTJ	14	INFP	5	Feeling (F)	52
INTP	13	ESFP	4	Judging (J)	128
ISFJ	10	ESFJ	4	Perceiving (P)	76

Three out of four MBTI® dimensions reported most by the managers in this study include an “Introvert” dimension. Seven of the most reported MBTI® dimensions include the “Thinking” dimensions. Overall, 152 of the 204 (74.5%) of managers reported the “Thinking” dimension.

Table 3 shows the results of the managers’ Big Five Personality® results and how they align with the managers’ MBTI® results.

Table 3: *Comparison of Big Five Personality® ranking versus MBTI® dimensions*

Conscientiousness	Openness to Experience	Surgency	Adjustment	Agreeableness
MBTI® “Judgement”	MBTI® “Sensing”	MBTI® “Extrovert”	N/A	MBTI® “Thinking”
ESTJ appeared highest in frequency in this study.	ISTJ is ranked #1 regarding higher frequency, and ISTP ranks #4 in this study.	ESTP and ENTJ rank in frequency #5 and #6 in this study.	MBTI® does not incorporate an adjustment/ neuroticism dimension. Therefore, this study did not show any correlation.	All six of the MBTI® dimensions found highest in frequency included “T”.

One of the questions under examination in this study was to determine if the MBTI® findings from the current study's manager population were found to be in alignment with their Big Five Personality® findings. Table 3 shows that they are indeed in alignment with all dimensions except for the Big Five Personality® "Adjustment." Note: the MBTI® does not have a dimension that covers "Adjustment," which is also referred to as "Neuroticism."[\[31\]](#)

Given that "Conscientiousness" is associated with "Judgment" in MBTI® terms, the ISTJ was observed to rank highly in this current study population. This is indicated in the Table 3 row, indicating the strength of the MBTI® element that most closely relates to the associated element of the Big Five Personality® test. For example, column 1 illustrates that the high presence of the "Judgement" dimension of MBTI® corresponds with "Conscientiousness." Likewise, the high ISTJ ranking aligns well with the high ranking of "Openness to Experience." Correspondingly, "Surgency" was found to rank consistently with ESTP, and ENTJ, and "Agreeableness" corresponded with the MTBI® "Thinking" dimension.

Discussion/Conclusion

The results of this study show a clear alignment between the Big Five Personality® and Myers Briggs® rankings. In particular, "Conscientiousness" with the "Judging" dimension; "Openness to Experience" with the "Sensing" dimension; "Surgency" with the "Extraversion" dimension; and "Agreeableness" with the "Thinking" dimension. Only the Big Five Personality trait of "Adjustment" did not correlate with any of the MBTI® dimensions.

Spark, Stansmore, and O'Connor[\[32\]](#) state that while introverts can lead using extroverted behaviors, they often avoid doing so because they overestimate the negative effect they will experience from acting like extroverts. A research study[\[3\]](#) indicated that a successful project manager would exhibit an extroverted and perceiving personality in conjunction with mastering the project management discipline. They go on to say extroverted managers carry out projects that show lower delay and lower waste time. Introverted managers often make "Over-processing" and "Defect" types of waste.

A key intellectual contribution of the current study shows that project managers can display a range of personality types to achieve project success. This range can extend from extrovert to introvert personalities. Another key intellectual contribution of the current study leveraging the MBTI[®], or Big Five Personality[®] assessments is positing relationships between personally dimensions and project success. Third, an intellectual contribution is that personality self-assessments can identify basic skills and identify areas for a project manager's personal growth. After taking a personality self-assessment, project managers may realize a need to improve on personal skills such as leadership, communication, team building, conflict resolution, motivation, emotional intelligence, and collaboration for success.[34] Moreover, since personality is central to all business interactions, a deeper understanding of it by project managers can increase profits and ROI.[35]

In conclusion, as the global industry changes rapidly, businesses that invest in project managers whose personalities match the project work are more likely to achieve project success.[36] Personality assessments such as the Big Five Personality[®] and MBTI[®] can be a valuable tool for project managers to reflect and to gain self-understanding, to gain an understanding of stakeholders and project team members' personality differences for project success, and to build a stronger company culture benefiting the company's overall business ROI.[37]

REFERENCES

- [1] Everwise, (2015). Why employers use personality tests. Retrieved from <https://www.geteverwise.com/human-resources/why-employers-use-personality-tests/>
- [2] Neito-Rodriquez, A. & Sampietro, M. (2017, November). Why business schools keep neglecting project management competencies. *PM World Journal* 6(11), 1-9.
- [3] PMBOK Guide. (2017). *A guide to the project management body of knowledge* (6th ed.). Newtown Square, PA: Project Management Institute.
- [4] Naughton, E. (2018). The future of project management. Retrieved from <https://www.linkedin.com/pulse/future-project-management-ed-naughton/>
- [5] PMBOK, 2017.
- [6] Aston, B. (2019). Why is project management important? Retrieved from <https://thedigitalprojectmanager.com/why-is-project-management-important/>

[7] Green, J. & Stellman, A. (2018). *Head first PMP: A brain-friendly guide* (4thed.). Sebastopol, Canada: O'Reilly Media, Inc.

[8] Ibid.

[9] Malsam (2019). Hard skills vs. soft Skills: Understanding the benefits of both. Retrieved from <https://www.projectmanager.com/blog/hard-skills-vs-soft-skills>

[10] Mapue, J. (2019). The fundamental project management skills you must have in 2019. Retrieved from <https://www.goskills.com/Project-Management/Articles/Project-management-skills>

[11] Green & Stellman.

[12] PMBOK, 2017.

[13] de Jager, P. (2019, June 28). The arcane art of facilitation [Video webinar]. Retrieved from <https://vimeo.com/345018780>

[14] ClientSpot. (2015). The importance of understanding personalities for project managers. Retrieved from <http://www.myclientspot.com/blog/the-importance-of-understanding-personalities-for-project-managers/>

[15] de Jager, 2019.

[16] Ellis, C. (2016). The Project manager's personality: The most important factor in a project's success. Retrieved from <https://www.linkedin.com/pulse/project-managers-personality-most-important-factor-colin-ellis>

[17] Mapue, 2019.

[18] Petty, A. (2009). Leadership & the project manager: Developing the skills that fuel high performance. Retrieved from <https://artpetty.com/wp-content/uploads/2009/05/ldrshipandprojmgrfinal.pdf>

[19] Aston, 2019.

[20] Green & Stellman, 2018.

[21] Bajic, E. (2015, September 28). How the MBTI can help you build a stronger company. *Forbes*. Retrieved from <https://www.forbes.com/sites/elenabajic/2015/09/28/how-the-mbti-can-help-you-build-a-stronger-company/#68e50ecad93c>

[22] Arora, M. & Baronikian, H. (2013). *Leadership in project management: Leading people and projects to success* (2nded.). Toronto, Canada: Leadership Publishing House.

[23] Myers & Briggs. (2014). MBTI basics. Retrieved from <https://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/home.htm?bhcp=1>

[24] Lussier, R. & Achua, C. (2016). *Leadership: Theory, application, & skill development* (6thed.). Boston, MA: Cengage Learning.

[25] Bajic, 2015.

[26] Martin, C. (1997). *Looking at type: The fundamentals*. Gainesville, FL.:Center for Applications of Psychological Type.

[27] Myers & Briggs, 2014.

[28] Sincero, S. (2012). Personality assessment tools. Retrieved from Explorable.com: <https://explorable.com/personality-assessment-tools>

[29] Lussier & Achua, 2016.

[30] Stavrova, O., Pronk, T., Kokkorist, M. (2019, November). Choosing goals that express the true self: A novel mechanism of the effect of self-control on goal attainment. *European Journal of Social Psychology*.

[31] Kan, J. (2019). How does Myers-Briggs Type Indicator relate to Big Five personality traits? Retrieved from <https://www.quora.com/What-are-the-most-common-mistakes-founders-make-when-they-start-a-company/answer/undefined/What-are-the-most-common-mistakes-founders-make-when-they-start-a-company/answer/Justin-Kan>

[32] Spark, A., Stansmore, T., & O'Connor, P. (2018, January). The failure of introverts to emerge as leaders: The role of forecasted affect. *Personality and Individual Differences* 121, 84-88.

[33] Bevilacqua, M., Ciarapica, F, Germani, M, Mazzuto, G. & Paciarotti, C. (2013). Relation of project managers' personality and project performance: An approach based on value stream mapping. *Journal of Industrial Engineering and Management*. 7(4), 857- 890.

[34] ClientSpot, 2015.

[35] InsightDataSolutions, (2019). Personality and business increasing ROI through personality assessment. Retrieved from <https://www.insightfordata.com/wp-content/uploads/2017/01/IDS-WP-Personality-and-Business-Increasing-ROI-Through-Personality-Assessment>

[36] Cole, C. (2017). Project management evolution to improve success in infrastructure projects. *Management Dynamics in the Knowledge Economy*, 5(4), 619-640.

[37] Bajic, 2015.

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