

ICMEM

The 8th International Conference on Management in Emerging Markets

Leading from Within: Dominant Personalities and Their Impact on Individual and Group Performance

Adita Pritasari¹, Muhammad Yorga Permana², Nurfaisa Hidayanti³, Dany Muhammad Athory Ramdlany⁴, Abel Tedjamulja⁵, Cahyaningtyas Nova Puspitadewi⁶

^{1,2,3,4,5,6}School of Business and Management, Institut Teknologi Bandung

Abstract: The impact of personality traits on individual and group performance has been a significant study area within organizational behavior. Among the various personality frameworks, the DISC model—Dominance (D), Influence (I), Steadiness (S), and Compliance (C)—offers a valuable lens through which to examine how different personality types influence work dynamics. At SBM-ITB, the Buddy Group method has been implemented as part of the learning strategy to enhance students' academic and personal development. It is a collaborative learning approach involving small teams of three students with diverse academic and personal backgrounds. These groups are designed to foster cultural exchange, teamwork, critical thinking, emphasizing collaboration and mutual support. The research involved 340 first-year students of SBM-ITB distributed into 114 Buddy Group in 12 tutorial classes, focusing on their personality types and academic performance. The findings confirmed no significant relationship between personality type and group performance; however, student groups with a member exhibiting the Dominance personality type can help enhance the skills of other group members, leading to overall group performance improvement. The practical implication of this research underscores the need to train students to develop or exhibit Dominance traits early, thereby highlighting the importance of these findings in shaping educational strategies.

Keywords: *DISC, buddy group, undergraduate student, learning method, personality type, students performance*

I. INTRODUCTION

Personality: Concepts, Theories, and Assessment

The study of personality has been a central area of psychology, with significant contributions from notable scholars such as Murray, Allport, Lewis, Cattell, and Goldberg, who have significantly advanced our understanding of personality. According to the American Psychological Association (APA), *personality* is defined as individual differences in patterns of thinking, feeling, and behaving (APA, n.d.). Psychological assessments are crucial for measuring these individual differences, particularly in organizational contexts (Baron et al., 2020). Among the various personality assessments, a widely recognized and empirically supported model in the social sciences is the DISC. The DISC model, with its practical applications in organizational contexts, has been a game-changer. Over 50 million people worldwide have completed DISC assessments translated into 35 different languages, indicating substantial growth in its use since Russell's (1994) study, reported 30 million tool administrations.

DISC Framework and Assessment

In 1928, Marston introduced the DISC theory in his book *Emotions of Normal People*. The DISC Model of Behavior categorizes personality traits into four types: Dominance (D), Influence (I), Steadiness (S), and Compliance (C). Each individual exhibits a unique combination of these traits, which influence their behavior and decision-making processes. These personality styles are characterized by distinct communication preferences, strengths, limitations, fears, and motivations. The practical application of Marston's theory into a behavioral assessment tool, as realized by Walter Vernon Clarke (Vaida, 2014), is a key

aspect of the DISC model, enhancing its utility and real-world relevance. Table 1 summarizes the general characteristics and contributions to a team for each DISC type.

DISC Personality Types

Dominance (D)

- Characteristics: direct; decisive; high ego strength; problem solver; risk-taker; self-starter.
- Contributions to Team: bottom-line organizer; values time; challenges the status quo; innovative.

Influence (I)

- Characteristics: enthusiastic; trusting; optimistic; persuasive; talkative; impulsive; emotional.
- Contributions to Team: creative problem solver; encourager; motivates others; positive sense of humor; negotiates conflicts; peacemaker.

Steadiness (S)

- Characteristics: good listener; team player; possessive; predictable; understanding; friendly.
- Contributions to Team: reliable and dependable; loyal team worker; compliant towards authority; good listener; patient and empathetic; reconciles conflicts.

Compliance (C)

- Characteristics: accurate; analytical; conscientious; careful; fact-finder; precise; high standards; systematic.
- Contributions to Team: provides perspective; conscientious and even-tempered; thorough in all activities; defines situations; gathers, criticizes, and tests information.

Prior Research on DISC and Other Personality Assessments

Academic research on personality-based performance assessments has been widely studied in the literature. For example, Furlow (2000) found that DISC assessments helped nursing students gain self-awareness, prepare for careers, and align their skills with job demands. Similarly, Kapp (2009) highlighted the positive impact of a team-building workshop in an occupational safety course, facilitating collaborative learning environments by emphasizing personality differences.

Previous research indicates that team member performance is influenced not only by individual personality traits but also by the overall personality composition of the team. Personality traits impact performance in several ways: by directly shaping individual behavior, fostering the creation of effective

teamwork and productivity norms, and influencing how members are assessed in comparison to their peers (Prewett, M. S., Brown, M. I., Goswami, A., & Christiansen, N. D., 2016).

Several other studies have sought to link team performance with various personality measurement tools, one of which is the Big Five Personality Factors, a model no less popular than DISC. The five broad personality traits described by the Big Five theory are Extraversion, Agreeableness, Openness, Conscientiousness, and Neuroticism. Research by Vasiljević and Lavbič (2023) on software engineering students demonstrated that teams with higher levels of Extraversion and Conscientiousness, combined with lower levels of Neuroticism, consistently outperformed others. Field studies in Bell's meta-analysis (2007) demonstrated Conscientiousness was the most consistently predictive trait of team performance. Conscientiousness reflects a tendency to be responsible, organized, hard-working, goal-oriented, and adherent to norms and rules. These characteristics closely resemble the compliance personality type in the DISC model.

II. METHODOLOGY

The impact of personality traits on individual and group performance has been a significant study area within organizational behavior and psychology. Among the various personality frameworks, the DISC model—comprising Dominance (D), Influence (I), Steadiness (S), and Compliance (C)—offers a valuable lens through which to examine how different personality types influence work dynamics. The DISC model, a widely used tool in understanding and predicting behavior, provides a structured way to analyze and interpret the influence of the Dominance (D) personality type, characterized by assertiveness, decisiveness, and a results-oriented mindset, on group interactions and overall performance outcomes.

At the School of Business and Management, Institut Teknologi Bandung (SBM ITB), the Buddy Group method has been implemented as part of the learning strategy to enhance students' academic and personal development. The Buddy Group method, a unique approach to collaborative learning, involves forming small teams of three students with diverse cultural, academic, and personal backgrounds. These groups, which serve as a microcosm of broader societal

diversity, are designed to foster cultural exchange, teamwork, and critical thinking, emphasizing collaboration and mutual support. This method is particularly relevant to our study as it provides a controlled environment to observe the impact of Dominance personalities on group dynamics and performance.

In blended learning and flipped classroom methodologies, Buddy Groups simulate real-world business teams where diverse perspectives and collaborative efforts are essential for success. Students within these groups engage in various activities, including role-plays, simulations, and group projects. In these activities, the influence of Dominance personalities can be observed. For instance, in a role-play, a Dominance individual might take charge and drive the group towards a solution, while in a group project, their assertiveness might ensure the team stays on track and meets deadlines. The presence or absence of a Dominance personality in a Buddy Group can significantly influence the group's overall effectiveness and the individual contributions of its members.

Teamwork and collaboration skills are essential for students pursuing business and management studies. In today's interconnected and complex business environment, working effectively in teams, navigating diverse perspectives, and collaborating towards common goals is critical to success. Recognizing the importance of these skills, SBM ITB introduces the Buddy Group method in the program's second semester. These groups are formed randomly, often bringing together students who have never interacted before, thus simulating real-world scenarios where professionals must quickly adapt to and work with new team members.

The random assignment of Buddy Groups challenges students to develop their teamwork and collaboration skills in a diverse setting. The presence of a Dominance personality within these groups is particularly significant. Dominance individuals often take on leadership roles, driving decision-making processes and setting the pace for group activities. Their assertiveness and results-oriented nature can help steer the group toward achieving high performance. Moreover, the presence of a Dominance personality can also contribute to the personal development of other group members, encouraging them to step out of their comfort zones, assert

themselves, and take on more significant roles within the group.

Understanding the impact of Dominance personalities within these groups cannot be overstated. Dominance individuals often take on leadership roles, drive decision-making processes, and set the pace for group activities. However, their influence can be double-edged. At the same time, they may propel the group towards achieving objectives, but they can also overshadow other members' contributions or lead to conflicts if not managed properly. Conversely, groups lacking Dominance personalities may need direction and decisiveness, potentially hindering their overall performance. Therefore, exploring how Dominance personalities affect group dynamics is crucial for educators and organizational leaders who aim to optimize team performance by strategically composing groups that leverage the strengths of all members. This study seeks to provide insights into effective group composition strategies by analyzing how these personalities influence individual and group performance. These findings can inform educational practices, ensuring that students gain the technical knowledge required for their fields and develop the interpersonal skills necessary for their future careers.

This study aims to investigate Dominance personalities' impact on individual and group performance within the Buddy Group framework. Specifically, it seeks to identify differences in outcomes between Buddy Groups that include members with a Dominance personality and those without such members. By analyzing these dynamics, the research will contribute to a deeper understanding of how personality traits affect collaborative learning environments and offer insights into optimizing group composition for enhanced educational outcomes.

III. RESULTS AND DISCUSSION

The research involved a survey of 340 first-year students of the School of Business and Management (SBM – ITB) who are distributed into 114 Buddy Group in 12 tutorial classes, focusing on their personality types and academic performance.

Table 1.
Sample Composition

Type	D	I	S	C	Population
n	74	145	246	187	326
Female	53%	62%	63%	60%	61%
GPA 1st Semester	3.42	3.34	3.43	3.46	3.42
Group Project - Paper	91.86	90.65	90.56	91.52	91
Group Interview - Buddy Game	85.2	84	83.56	82.99	83.68
Individual Exam	63.67	63.33	64.67	65.53	64.51
Peer-Review	2.86	2.84	2.85	2.86	2.85

Table 1 presents the distribution of personality types among the respondents, focusing on the two most Dominance types of DISC model, as each individual tends to exhibit more than one personality type. Statistically, Dominance is the least common (22.70%), while Steadiness is the most prevalent (75.46%). Female respondents are underrepresented in the Dominance group (53%) compared to other variables, and the Compliance personality group has the highest GPA among all types.

Regarding exam scores, the Dominance students achieved the highest scores in group projects, whereas the Compliance students had the highest individual exam scores. Further analysis was conducted using a paired sample t-test to determine whether these differences were statistically significant. This test compares two related samples, typically the same subjects, under different conditions. According to Widiyanto (2013), the paired sample t-test is a method used to evaluate the effectiveness of a treatment by comparing the means before and after the intervention.

Table 2.
Individual Level

	With Dominance Member	Without Dominance Member	t-test
n	57	57	
Group Score			
Group Project - Paper	91.59	90.37	
Group Interview - Buddy Game	84.36	82.21	**
Individual Score			
Individual Exam	64.86	64.15	
Peer-Review	2.84	2.85	

Table 2 compares Buddy Groups with and without Dominance members, revealing that the proportions are randomly balanced. Buddy Groups with Dominance members have higher group scores, with significant differences observed in Buddy Game scores. Although the Dominance group's individual scores are higher, they are not statistically significant.

Table 3.
Group Level

	Dominance Individual	Non-Dominance Individual	t-test
n	74	252	
Female	52%	63%	*
GPA 1st Semester	3.42	3.42	
Group Score			
Group Project - Paper	91.86	90.75	*
Group Interview - Buddy Game	85.2	83.23	***
Individual Score			
Individual Exam	63.67	64.75	
Peer-Review	2.86	2.85	

Table 3 indicates that individuals with Dominance personalities have higher group scores, with t-test results confirming significant differences. However, no differences were observed in individual scores or peer reviews. This suggests that Dominance individuals can lead their groups to better performance, as reinforced by the findings in Table 2.

Table 4
Group Level

	With Dominance Buddy	Without Dominance Buddy	t-test
n	90	162	
Female	63.30%	63%	
GPA 1st Semester	3.39	3.43	
Group Score			
Group Project - Paper	91.28	90.46	
Group Interview - Buddy Game	83.83	82.9	*
Individual Score			
Individual Exam	64.07	65.97	*
Peer-Review	2.83	2.86	

In table 4, Dominance individuals were excluded from the analysis to focus on those without a Dominance personality type. Interestingly, individuals with a Dominance buddy in their Buddy Group also achieved better group scores, both in the group project and group interview. These findings have significant implications for group dynamics. The researchers may suggest that the presence of Dominance individuals in a group can lead to better group performance, as seen in the higher group scores in the group project and group interview. This implies that non-Dominance individuals can enhance their group performance when paired with a Dominance-type buddy, inspiring them to strive for better performance.

IV. CONCLUSION

This research makes a pioneering contribution by unveiling the role of the Dominance personality type in shaping group performance among business and management students. This discovery is of immense significance, as it underscores the need for these competencies to be honed early on, given the future

demand for teamwork and collaboration among graduates of Business and Management programs.

Previous research on personality types has predominantly focused on the Big Five Personality Traits (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) rather than the DISC model, a popular behavioral assessment tool that categorizes individuals into four personality types: Dominance, Influence, Steadiness, and Conscientiousness. This may be due to the challenges associated with freely accessible measurement tools for the DISC model.

Our findings confirmed no significant relationship between personality type and group performance; however, student groups with a member exhibiting the Dominance personality type can help enhance the skills of other group members, leading to overall group performance improvement.

The practical implication of this research is clear—it underscores the need to train students to develop or exhibit Dominance traits early. This finding paves the way for further exploration of action plans that can foster the emergence of Dominance, thereby enhancing group performance in business and management students.

Acknowledgment

This research was supported by the Program for Research, Community Service, and Innovation Grant (PPMI) from the School of Business and Management, Institut Teknologi Bandung. We extend our deepest gratitude to the institution for their financial assistance, which made this work possible. We also wish to express our sincere appreciation to our colleagues and the administrative staff at the School of Business and Management, whose invaluable support and guidance significantly contributed to the successful completion of this research. Finally, we acknowledge the constructive feedback and encouragement provided by our peers, which greatly enhanced the quality of this work.

REFERENCES

- [1] Baron, I, Melania, Agustina, H. (2020). The role of psychological testing as an effort to improve employee competency, *Journal of Management and Marketing Review*, 5. 1 15. 10.35609/jmmr.2020.5.1(1).
- [2] Bell, S. T. (2007). Deep-level composition variables as predictors of team performance: A meta-analysis. *Journal of Applied Psychology*, 92, 595–615.
- [3] DISC Insights. <https://discinsights.com/pages/disc-theory>
- [4] Furlow, L. (2000). Job profiling: Building a winning team using behavioral assessments. *Journal of Nursing Administration*, 30(3), 107–111. <https://doi.org/10.1097/00005110-200003000-00001>
- [5] Kapp, E. (2009). Improving student teamwork in a collaborative project-based course. *College Teaching*, 57(3), 139–143.
- [6] Marston, W. M. (1928). *Emotions of Normal People*. London: Kegan Paul Trench Trübner & Co. Ltd.
- [7] Schilpzand, M. C., Herold, D. M., & Shalley, C. E. (2011). Members' openness to experience and teams' creative performance. *Small Group Research*, 42(1), 55–76.
- [8] Vaida, B. (2014). *Personality Boost: Develop your strengths and tackle your weaknesses using DISC, a world-renowned behavior test*. CreateSpace Independent Publishing Platform.
- [9] Vasiljević, J., & Lavbič, D. (2023). A data-driven approach to team formation in software engineering based on personality traits. *Electronics*, 13(1), 178. <https://doi.org/10.3390/electronics13010178>.