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## Impact of mutual recognition of personality among members on team performance and psychological safety

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The importance of teamwork is increasing now in the world. The time spent by any manager or employee in some collaborative activities has expands by 50% in the last 20 years, according to a survey conducted by Corss et al. (2016) of the University of Virginia.

The reason for this is that with the spread of the Internet, not only the needs of customers are diversifying as the organization's global development progresses, but also the life cycle of products is accelerating as competing companies increase. Therefore, companies can't deal with the conventional hierarchical organization structure and business form (Yamaguchi 2009).

For the reason, not only the Individual work had to be the Teamwork, but also the form of team organization will change to the Taskforce team (Edmondson 2014).

On the other hand, problems still remain concerning the use of the team. In the 2006 survey of Gallup, which targeted 1001 people over the age of 18, 97% of respondents rated their leadership abilities as average or above Those who answered that they had the experience of directing the team covered more than two-thirds of the target. However, in the questionnaire survey conducted by the US Manufacturing Performance Institute (MPI) in 2003 According to

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the survey, 70% of the respondents said that they used the team to achieve their business goals, while those who responded that their efforts as "very effective" are subject to survey It is only about 14% of the organization, 50.4% is "somewhat effective", while respondents who are more than one-third of the others evaluate as "not effective", so the team with some problem It accounts for half (Rath & Conchie edition 2013).

For that reason, many researchers focusing on psychological factors such as members' attitudes and emotional recognition of teamwork, such as unity and cooperation (Yamaguchi 2009). In Particular, Personality and Psychological safety are attracting attention in recent years.

Hackman, a leading expert in organizational behavioral science, has been found from over 40 years of research that it is the character, attitude and behavioral style of a team member as having the greatest influence on collaboration activities (Haas & Mortensen Ed. 2016).

In addition, Toegel et al. (2016) have been found that most of the conflicts that lose value with team members are due to various factors such as personality, diligence, race, sex, age. In addition, at the individual level, as a result of Judge et al. of the University of Florida it has been found from the follow-up of 25 years, it is known to gain a dominant advantage in life if the individual is aware of the own strengths (ability caused by the acquisition of personality based and knowledge and technology). At the team level, In a survey, Gallup, Inc. is targeting the more than 18-year-old of 1009 people in 2002, the probability that entertains the enthusiasm to work is 73% when the management team is able to focus on the strengths of the employees,

When it is not possible attention has been found to fall to 9% (Rath & Conchie Ed 2013). Psychological safety is "an atmosphere that allows people to speak freely about related ideas and emotions, which affect team performance" (Edmondson 2014).

A survey of internal teamwork that Google announced in 2016 showed that psychological safety is important for creating a perfect team and it is also defined as the rule of five keys their company's teamwork (New York Times Magazine 2016). However, at the same time, psychological safety is low in general workplaces. According to a survey conducted by

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Garvin et al. (2008), "The median of psychological safety in various industries in various countries is only 76/100 points, a significant proportion of the world's labor force is psychological safety indicates a by which it suggest that do not reach the optimal level" Challenges as their solutions, Edmondson (2014) is shown the approach which building of psychological safety for the leader. However, the practice is dependent on the competence of the leader, which is the building degree by the leaders in the same practice differs. In addition, it is directed to leaders of hierarchical organizations, can't say to be effected in the condition (non-hierarchical type) where the status of leaders and members is flat.

Therefore, if we can build a methodology that systematically fosters team performance and psychological safety as a factor for the team performance for future team form, it will be beneficial for the future in many organizations.

In this study, I targeted task force teams and non-hierarchical teams, and make inferences to a necessity for members to foster psychological safety and to understand each other's personality. So I clarified the influence on mutual recognition of personality among members on teamwork, made it a foothold in establishing systematic methods leading to fostering psychological safety and team performance.

First, I carried out semi-structured interviews and psychological safety research for individuals to participate in the University of Active Learning. Then, I set up a hypothetical model of psychological safety and personality and confirmed psychological safety value for Group researcher.

Next, a laboratory experiment was conducted for the students. In this experiment, I conducted a mutual recognition of personality only in the latter half for teams who work with twice in the first half and the second half for a given task.

In addition, I measured the degree of psychological safety of individuals and teams from measurements of performance from teamwork response, psychological safety value for individuals after teamwork, and then presented this research.

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As a conclusion, the analysis of the experimental results showed the following.

From the comparison of the standard deviation between the first half and the second half of individual psychological safety values for each team, a mutual recognition showed that the standard deviation of individual psychological safety values within the team decreased by half or more teams. This possibility may be that mutual recognition of personality has brought about the effect of bringing individuals' embracing of psychological safety closer to the same on the team.

From the analysis by patterning the difference between individual score and average score (by the team), and the team score for each subject, the difference between individual score and average score and the difference between individual score and team score are determined by individual's psychological safety It did not affect.

From the analysis of individual psychological safety values and personality trends, It was found that the way of change in psychological safety with time is different depending on personality traits.

From the above, it is the significance of this research that the possibility of systematically establishing psychological safety in the team could be presented from confirmation of the relationship between personality characteristics for persons and psychological safety.

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