



Thinking Styles, Teamwork Quality and Performance

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ABSTRACT

This study entitled Thinking Styles, Teamwork Quality and Performance investigated the contribution of the uniqueness of individuals in team dynamics in order to obtain the potential of individuals in organisations. As individuals work together in a team, and each individual brings their own characteristics, an organisation needs to know how individual characteristics may influence day-to-day interaction in the workplace. This study could be influential for organisations' effectiveness by considering human thinking styles at work. Moreover, the findings enriched to the limited empirical research evidence about the contribution of individual differences in the workplace.

This study had four objectives. First, this study explored whether the instruments measuring thinking style and teamwork quality which originated from western countries corresponded with Indonesian culture. Second, this study examined the significance of demographic factors in individual's thinking styles which include organisation, gender, age, education, work position, work tenure and culture. Third, this study explored the correlation between thinking styles and the quality of teamwork during team interaction, as well as examining the relationship between thinking styles and performance on both sides; individual performance and team performance. Lastly, as performance is a complex matter, this study explored some other aspects that influence team performance in an organisation.

Organisations require instruments that are simple, practical and applicable to support management activities. This study utilised Thinking Style Inventory (TSI) based on the Theory of Reality Construction (Sofa, 2002) to assess the thinking styles profile of employees. The instrument can be categorised as a simple and practical tool for organisations which measure five dimensions of thinking styles; conditional, questioning, exploring,

independent and creative styles. To assess teamwork quality, the Teamwork Quality instrument (TWQ) proposed by Hoegl & Gemuenden (2001) was used. The study investigated whether both instruments are applicable in management contexts, for example, in identifying thinking styles which are useful in selecting appropriate team members as well as assessing the quality of teamwork that occurred in a team.

This study applied mixed methodology in which quantitative study through web-based survey and qualitative study through semi-structured interview were conducted in the same time. Quantitative study captured the thinking styles, teamwork quality and performance from individual assessment, while qualitative study explored managers' perceptions of the role of thinking styles in team functioning as well as their conceptions of some aspects that influence team performance within organisations in Indonesia.

Factor analysis using Varimax rotation verified the validity of the TSI and TWQ instruments in the Bahasa Indonesia version. Cronbach alpha coefficient proved that the instruments have sufficient internal consistency. This study validates that TSI in the Bahasa Indonesia version is a considerable instrument to examine the thinking style profile, and that the TWQ instrument in the Bahasa Indonesia version can be used to measure the quality of teamwork in Indonesia.

An analysis of variance revealed that demographic factors impact on thinking styles. The findings indicated thinking styles differ significantly across organisations, gender, age groups, work positions, work tenure and cultural backgrounds. The study revealed that no statistically significant differences between thinking styles were identified across the groups of education.

Statistical analyses of the quantitative data demonstrated that at the individual level analyses, thinking styles might be a poor indicator of individual performance. At the team level analyses, aggregated team members' independent style correlates negatively with three aspects of teamwork quality, such as coordination, mutual support and cohesion. In terms of team performance, Independent style has a negative correlation with time-related team performance. However, exploring style has a positive correlation with overall team performance. Constructs analyses from the qualitative study produced a model of team performance which embraces four significant factors of team performance; composition, processes, leadership and organisational environment.

Significant contributions to the theoretical and practical implications can be drawn from this research. The theoretical contribution to the body of knowledge includes the understanding of how thinking styles relate to team functioning, as well as the development of a thinking styles instrument in the Bahasa Indonesia version. In management practices, human resource (HR) practitioners can use TSI to assess other individual characteristics that maybe required by an organisation in order to build better team composition. The instrument can be used in selection and assessment processes. The knowledge of thinking styles in team functioning can be influential when an organisation develops training materials for increasing skills and knowledge of employees.

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ABBREVIATION

CSA	: Cognitive Styles Analysis
CSI	: Cognitive Style Index
CoSI	: Cognitive Style Indicator
IPO	: Input-Process-Output
HBDI	: Herrmann Brain Dominance Instrument
HR	: Human Resource
IQ	: Intelligence Quotient
KSA	: Knowledge, Skill and Ability
LNTSP	: Linear-Non-linear Thinking Style Profile
MBTI	: Myers-Briggs Type Indicator
REI	: Rational-Experimental Inventory
SBU	: Strategic Business Unit
SOE	: State Owned Enterprise
TORC	: Theory of Reality Construction
TSI	: Thinking Style Inventory
TSI-MSG	: Thinking Style Inventory-Mental Self Government
TWQ	: Teamwork Quality
VP	: Vice President

KEY-TERMS AND DEFINITIONS

Cohesion	refers to the degree to which team members want to remain on and stick to the team. Cohesion describes the feeling of togetherness and belonging in a team.
Communication	provides a way for the exchange of information. The quality of communication can be described in terms of frequency, formalisation, structure and openness of the information exchange.
Conditional style	refers to the preference of accepting what others think and say without questioning.
Coordination	describes the degree of common understanding regarding the interrelatedness and current status of the individual contributions of specific tasks.
Creative style	refers to the preference of thinking in pictures to get a sense of the whole.
Effort	refers to extraordinary amount of physical or mental energy activities that are required to achieve something. In work contexts, workload sharing and prioritising of the team's task are indicators of the effort of team members.
Exploring style	refers to the preference of looking for alternatives and differences.
Independent style	refers to the preference of allocating priority to one's own thinking.
Individual performance	refers to the degree to which individuals can achieve established goals, can multitask between several projects, can meet the productivity standards, can express ideas effectively, require minimal supervision, can identify problems and react to problems in an appropriate time frame (Qualtrics, 2010).
Mutual support	refers to the intensive collaboration of individuals in which the individual has a cooperative mind frame rather than a competitive

intention. Mutual support describes respect among individuals, helping each other, giving assistance when needed, and developing each member's ideas rather than trying to outdo each other.

Team performance refers to the ability of the team as a whole to meet established quality, quantity and time objectives. The measurement includes how a team achieves established goals, how a team meets productivity standard, how team finished the duty in a timely manner, how team has positive attitudes towards changes and innovation and how team can implement recommended output (Barrick, Stewart, Neubert, & Mount, 1998; Hackman, 1990; Hoegl & Gemuenden, 2001)

Teamwork Quality refers to the quality of interactions between team members and describes how well team members collaborate or interact in terms of goal achievement (Hoegl & Gemuenden, 2001)

Thinking Styles refers as the most comfortable ways of individuals responding to a situation that lead to specific habitual styles that influence people's cognition and emotion which guide and control people's daily activities (Sofu, 2008)