How Transformational Leadership Influences Individual Resilience and Team Resilience in Project Management

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Abstract

Dealing with risk and uncertainty, team resilience plays key role in the successful project management. When performing their project tasks, the team faces the dynamics in the projects will lead to major challenges or stress. The project team who are able to bounce back from a negative experience are less likely to experience the detrimental effects of intimidating uncertain situations. The study aims to see whether transformational leadership can influence individual resilience and team resilience. This study also aims to see whether resilience in the individual level can influence team resilience. A descriptive quantitative study with 349 respondents from project teams from various industry was conducted. PLS was used to analyzed the relationship among variable. The finding of the study showed that transformational leadership has a positive significant impact to both team and individual resilience. Individual resilience has a positive significant impact to team resilience.

Keywords
individual, leadership, team, transformational, resilience

1. Introduction
Dealing with risk and uncertainty, team resilience plays key role in the successful project management. When performing their project tasks, the team faces the dynamics in the projects will lead to major challenges or stress. Therefore, resilience project team who are able to bounce back from a negative experience are less likely to experience the detrimental effects of intimidating uncertain situations will be crucial for the successful of the project. Resilience studies in individual level have been extensively studied. In Scopus database the search result for resilience hit more than 137.000 articles and more than 17.000 are about individual resilience. Organizational resilience search hit more than 4.000 articles. Yet, team resilience only hit less than 2.500.

1.1. Objectives
This study aims to see whether transformational leadership influence both individual and team resilience, and whether individual resilience influence team resilience. This study also aims to see the mediation effect of individual resilience to the relationship between transformational leadership to team resilience.

2. Literature Review
The project work is structured in and arounds teams (Moga 2017). Dealing with risk and uncertainty, team resilience plays key role in the successful project management. When performing their project tasks, the team faces the dynamics in the projects will lead to major challenges or stress (Killen et al. 2008; Killen & Hunt 2010; 2013); (Teller 2013; Teller & Kock 2013). Resilient teams are more likely to be productive, agile and innovative during the turbulent times (Sharma & Sharma 2016). The difference between resilience team and not could be the difference between survival and broke down when facing adversity (Vera 2017).

(Sharma & Sharma, 2016a) define sesilience is ability to bounce back (and beyond) from unfavorable condition and positively handling and adapting to positive changes. Team resilience has a difference construct with individual

resilience (Sharma, Hartwig, Vera). Team resilience is defined as "a team's belief that it can absorb and cope with strain, as well as a team's capacity to cope, recover, and adjust positively to difficulties" (Carmeli, Friedman, & Tishler 2013) in (Vera et al. 2017). Will team consists of individual who are resilience become a resilience team? Team with each member has individual resilience is not necessarily becomes a resilience team. Lack of communication and support could result in poor team effectiveness (Hartwig 2020). However, studies argue that from individual perspective, individual resilience contributes to team resilience (Hartwig et al. 2020; McEwen & Boyd 2018; Sharma & Sharma 2016; Vera et al. 2017). Individuals who are more resilient are less likely to undergo physically and emotionally difficulty while struggling with adversity (Cooper 2013; Morgan et al. 2013) in (Sharma & Sharma 2016b).

Leadership is known to have a critical role in team resilience. During crisis or difficult time leaders' role are providing guidance, creating stability and trust, and engaging with the team to ensure the organization returns to productivity (Lockwood 2005)(Bowers et al. 2017) (Hartwig et al. 2020). During difficult time, leaders who has a sense of belonging to the team can increase the willingness of the team to contribute to group objective as well as social supports among members Leadership style which show high team identity and team supporting is transformational leadership.

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Transformational leadership, together with transactional leadership, was conceptualized by Bass (1985) in (Girardi & Rubim Sarate 2021). Just as the term used, transformational, Transformational leaders do not settle for status quo, however, they are continuously pursuing an appealing and challenging future vision. Transformational leaders show creative behavior, display unconventional approach, and serve as a good role model for innovation (Chen et al. 2014). Jansen et al. (2009) in (Tung 2016) found that transformational leadership is associated with exploratory approach, on the contrary transactional leadership associates with exploiter approach.

Literature suggests that transformational leaders is an ideal role model to their follower. They are charismatic and able to inspire their follower to reach the highest level of achievement. Transformational leaders are also able to convince each member of the follower to take ownership of the group goals. They promote incremental contributions of the follower and inspire them to contribute exceeding the call of duty (Hoang-Tung et al. 2017). They eye on the long term vision, rather than short-term goals. Refer to the concept from (Girardi & Rubim Sarate 2021); (Hoang-Tung et al. 2017); (Rasheed et al. 2021), and (Chen et al. 2014) state the 4 I of transformational leadership which are Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration

*H*1: Transformational leadership will be positively associated with individual resilience
H2 :Transformational leadership will be positively associated with team resilience
H3 :Individual resilience will be positively associated with team resilience.

3. Method

This research is a descriptive quantitative study. A survey using structured questionnaire as the instrument is conducted via online survey using google form. Questionnaires contained statements related to the variables and other additional information such as gender, age, educational background, industry, size of the team, length of team establishment, type of team project, perceived of project difficulty. For questions related to variables measured, a six-point Likert scale (from 1 strongly disagree to 6 strongly agree) was used for respondents to rate their opinion. With a six-point Likert scale, the mid-point is omitted to avoid social desirability bias (Nadler et al. 2015).

This study uses purposive data collection method. The target respondents were project management team members. All measurement scales used in the present study were measured using a framework from a previous study. Employee (individual resilience) was measured by 9 items modified from (Tonkin 2016), Transformational leadership was measured by 6 items modified from Aragon-Correa et al. (2007) and Chen et al. (2014), and team resilience was measured by 8 items modified from Malak 1998. Data collected was analyzed with PLS version 3.3.9.

4. Result and Discussion

A total of 349 questionnaires are eligible for further analysis. The respondent demographic is showed in table 1. Most of respondents are manager level (52%). They are mostly from construction (41%) and ICT (31%) industry. Respondents mostly come from National Private Company (52%) and most of them have experiences in handling many projects (60% have >5 projects).

Table 1. Respondents' Demography

Category	Breakdown	Percentage
Roles/Function		
	Managers/Senior Managers	*51.86 %*
	Others	*5.73 %*
	Team leaders/Supervisors	*16.91 %*
	C-Level/Business Owners	*4.30 %*
	Staffs	*21.20 %*
Industry background		
	Construction	*41.32 %*
	ICT	*30.54 %*
	Others	*28.14 %*
Company type		
	National private company	*52.99 %*
	Multinational company	*14.07 %*
	State owned company	*23.65 %*
	Others	*9.23 %*
Numbers of projects that have been handled		
	First projects ever	*6.30 %*
	Up to 5 projects	*23.21 %*
	5 to 10 projects	*21.49 %*
	More than 10 projects	*49.00 %*

Table 2 shows that all indicators used to measure variables have factor loading more than 0.7, and AVE >0.5, therefore, it can be concluded that all measurements are valid. All measurements of variables are also reliable based on Cronbach's α (>0.7) and Composite Reliability (>0.5).

Table 2. Reliability Validity and Factor Analysis

Construct	Items	Reliability and Validity			Factor loadings	*t*-value
		Cronbach's α	Composite Reliability (CR)	Average Variance Extracted (AVE)		
Individual Resilience (EMRS)		0.824	0.877	0.587		AVE
	EMRS01				0.727	20.921
	EMRS04				0.792	31.706
	EMRS05				0.747	25.267
	EMRS08				0.756	23.750
	EMRS09				0.807	31.274
Transformational Leadership (TFRL)		0.912	0.932	0.696		
	TFRL01				0.794	24.133
	TFRL02				0.844	40.611
	TFRL04				0.763	19.445
	TFRL05				0.823	31.390
	TFRL06				0.801	27.336
Team Resilience (TRES)		0.865	0.902	0.649		
	TRSL01				0.876	63.113
	TRSL02				0.848	47.255
	TRSL03				0.804	20.181
	TRSL04				0.862	36.918
	TRSL05				0.815	27.219
	TRSL06				0.797	24.775

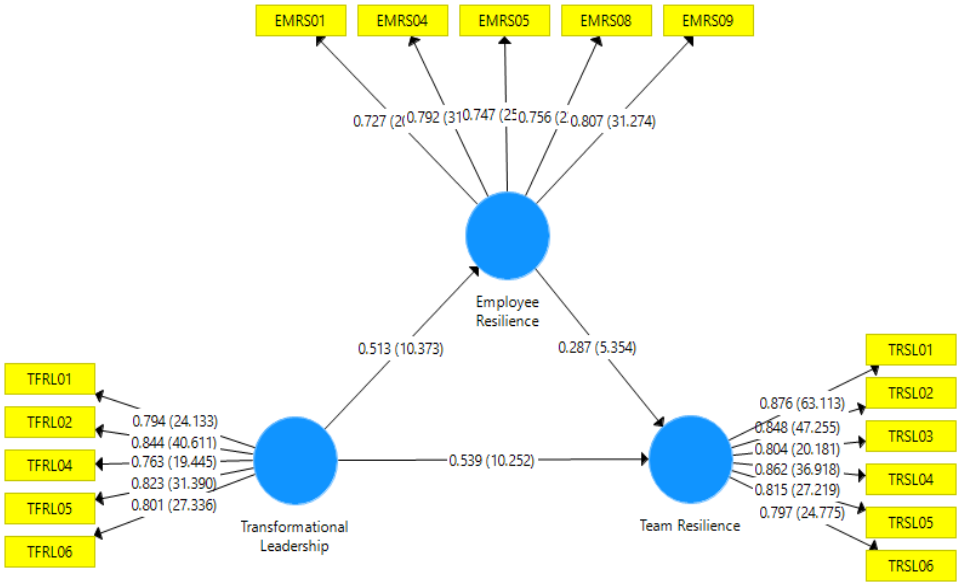

Figure 1. Structural model analysis

Figure 1 shows that the directional of relationships between transformational leadership to individual resilience, transformational leadership to team resilience and individual resilience to team resilience are positive. Based on the T value (value under the bracket), it can be concluded that all relationships are significant.

The relationship between transformational leaderships transformational leadership to individual resilience is positive significant. The relationships between transformational leadership to team resilience is also positive significant. The positive significant relationship is also found between individual resilience to team resilience. Therefore, it can be concluded that the relationship between transformational leadership to team resilience is partially mediated by individual resilience.

5. Conclusion

Having team resilience is critical for project management team since project management teams have to deal with risk and uncertainty. This study confirms that having individual which is resilience him/herself will help the establishment of team resilience. This study also confirms that having transformational leadership style influence the resilience of the team. Furthermore, the relationship between transformational leadership to team resilience is partially mediated by individual resilience.

This study only evaluates the people aspect in building resilience team. Referring to Resources Based Theory (RBT), further study to see resources aspect can be recommended. This study only evaluates up to the team resilience, further study to whether having team resilience influence team performance after unfavorable situation is also recommended.

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