

Military Leaders' Leadership Styles and Subordinates Hardiness Level: Can Transformational and Transactional Leadership Influence Soldier's Hardiness?

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Abstract: In comparison with the western military setting, the absence of the study of leadership styles and personality hardiness in the Malaysian Army (MA) has been noticeable. Personality hardiness of the soldiers', and whether military transformational and transactional leadership provides a significant impact on soldier's hardiness level, is critical in a modern military environment in facing many unique challenges, due to the increase of forward deployment rate. As such, the present study examines the proposition that the military leader's leadership styles could enhance military subordinate's hardiness level, as conceptually suggested by previous research. This is employed via the use of an investigation of Experimental Vignette Methodology (EVM); pre-test and post-test collected data on soldiers' hardiness level, with the intervention of leadership paper vignettes which involved 169 participants for Experiment 1; (transformational leadership), and 143 participants for Experiment 2; (transactional leadership). Additionally, MLQ Form 6S was employed for transformational and transactional leadership, while DRS 15 was utilized to measure the hardiness level. The results from the two experiments found that transformational leadership significantly affected subordinate military hardiness, while transactional leadership had no influence on hardiness. Finally, the implications of the present findings are assumed to further facilitate further hardiness research in the Malaysian Army, with regards to subordinate's commitment and performance.

Keywords: Experimental Vignette Methodology (EVM), Transformational Leadership; Transactional Leadership; and Hardiness

INTRODUCTION

The Malaysian Army (MA) was established to uphold the territorial integrity of the nation. The forces have been evolving for decades through a modernization process in line with regional and global changes [1-2]. However, the present focus for the MA is to accommodate the national defense policies, with the emergence of the Revolution in Military Affairs (RMA) that focuses on the technological edges [3-4].

The emergence of diverse challenges and unique environments in the military tactical threat, even among superpowers [5], has directly affected military organizations among developing nations, such as Malaysia [6]. Therefore, these developments have increased the challenges military leaders face in preserving soldier's commitment to their job [7-8]. This was one of the leadership setbacks identified during the MA annual unit commanders conference. Furthermore, the increase of terrorism threats in Eastern Sabah has also resulted in high forward deployment intensity [9]. According to [9], there has been increase of forward deployment intensity

involved combat and combat support units in the MA for the past few years, with the majority of the infantry units deployed up to six months in 12-month cycles as present scenarios have resulted in a significant number of soldiers leaving the organization earlier than retirement age [10]. This could be attributed to soldier's commitment and hardiness [10], considering the workforce of 7% from total MA strength in 2015, 5.3% in 2016, and 8.3% in 2017 respectively opted for early retirement. Hence, in relation to the present challenges, personality hardiness has been exhibited as a significant role in managing stress and resiliencies among the soldiers [11-12]. The modern nature of warfare that is volatile, uncertain, complex, and ambiguous (VUCA) in environments and associated with high physical intensity, which could lead a soldier to a high stressful situation, undoubtedly demand the soldiers to be resilience [13].

There have been studies across the western military background with interest in examining the relationship between leadership styles and hardiness; such as officer cadets leadership performance in the United States [14-15], a group of

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Army Captain in the US Army [11], and Norwegian Navy Cadets [16]. Besides, there has been a debate within the theoretical context of hardiness, whether it could be developed and changed due to the factors of leadership influences. Conceptually, scholars have suggested the roles of military leaders in enhancing soldier's hardiness [17-18]. For instance, [19] found a significant empirical longitudinal evidence, although, there has been no change in the level of hardiness in three years of cadet training, a difference in cadet's hardiness variances, in which some of the cadets have shown the increase of hardiness were identified during the training processes. These shows that hardiness can be developed. Hence, this study will explore the possibility of the unit commander's leadership influences on the soldier's hardiness level.

Nevertheless, despite the significant numbers of studies that have been conducted over time regarding hardiness and leadership behavior, yet there has been no research carried out in examining how leadership styles; namely the transformational and transactional could influence the military subordinate's hardiness. Moreover, the present research found that there has been no hardiness study conducted with regard to the MA. Therefore, the use of EVM of leadership styles was employed in the present research as an avenue to examine the gap of leadership-hardiness relationship.

On the other hand, scholars have proposed the possibilities of military leaders that can influence soldier's hardiness [17-18], but until now this has not been implemented within the military organization, except there has been a study involved a white-collar employee in Italy. Hence, the present study examines the effect of the MA unit commanders' transformational and transactional leadership styles vignette experiment, on subordinate's hardiness level.

THEORETICAL FRAMEWORK AND HYPOTHESES

Hardiness

In a meta-analytic analysis conducted by [20], it was explained that leadership styles behavior, as well as the leaders' stress level, could possibly influence the nature of the leader-follower relationship, which later affect subordinate's stress level and cause burnout. Significantly, a research tested hardiness, and recognized it as a stress buffer [21-22] level of subordinates. Hardiness first mooted when scholars found that psychological stress is associated with illness [23]. [21] defined hardiness as what can control, or influence ones' experiences, and remain healthy within a stressful environment. Hardiness comprises three components; commitment, control, and challenge [21]. Hardiness theory describes as someone's ability to encountered difficulties and

challenges under stressful circumstances [21], [24-25]. The theory also explained how high hardy individuals view things as inspiring and meaningful, are actively occupied with surrounding situations, while at the same time able to influence and control situations [26]. Similarly, it is how high hardy person is open to exploring new experiences as opportunities for own growth [26].

Studies regarding hardiness in the military environment showed that psychological hardiness is recognized as a positive characteristic of good soldiers [27-28]. Additionally, many relevant studies were also examined in the western military background that supports the association between hardiness and soldier's performance; for instance, the rate of officer's cadet retention from training was related by their hardiness level [15]. A longitudinal seven years research confirmed that hardiness predicted leadership performance in their assigned unit United States (US) [11]. In another research, hardiness was found to be a factor that influenced alcohol consumption rate, with high hardy soldiers, consume less alcohol than the low hardy personnel among US troops deployed to Afghanistan, and the Norwegian Army deployed to Kosovo [27]. Meanwhile, researches involving multi-forces from a different military background in the International Security and Assistance Force (ISAF) acknowledged that the hardiness level of the soldiers is related to dedication and vigor [29].

Studies within the western military recognized hardiness as factors among cadet performance in the US and Norway [11], [30], and authentic leadership correlates with hardiness [31]. Similarly, few studies also supported the idea of how hardiness contributed to trained soldiers been a better military leader [14], [19], [32]. However, very few attentions have been given to the possibilities of leaders enhancing military subordinates' hardiness, as conceptually proposed by [17-18]. Evidently, hardiness plays an important role in influencing an employee's commitment and performance. This raises the question on what can be done to individual employees' hardiness.

One possible antecedent is leadership [17-18]. In one significant instance of Italian white-collar employees' study, transformational leadership recognized as a predictor of employees' hardiness level [33]. This study has proved that hardiness can be changed, as a result of positive leadership. Hence, the present study considered to examine the transformational and transactional leadership styles of the MA unit commander influenced over the subordinate's hardiness level.

Full Range Leadership Model (FRLM)

FRLM was developed and introduced by [34], and the model was enhanced by later scholars [35]. This framework, covering a wide range of leadership strategies that encompasses transformational,

transactional as well as Laissez-Faire [36]. Recognized by many studies as the new contemporary leadership theory, FRLM has been used as a basis for many kinds of leadership studies in recent decades [37-38]. However, the present study focusing on two leadership styles; transformational and transactional leadership as suggested by [36-37]. Furthermore, [36] argued that these two styles of FRLM are related to the concept of resilience leadership suited to current work. Moreover, Laissez-Faire considered as negative leadership or lack of leadership [38]. Therefore, it was excluded from the present research.

[33] explained that the transformational-transactional leadership theory is a comprehensive contemporary leadership style that attracted many researchers in modern leadership studies [33-34]. The study of [39] selected transformational vis a vis transactional leadership as leadership predictors based on the recognition that the two leadership styles emerged as contemporary styles in modern leadership research. Research on emerging theories spanned from the millennium era up to year 2012 acknowledged the importance of modern theories that emphasis on dynamic and complexity of leadership practices [39]. According to [33], transformational leadership styles consist of four factors; idealized influence charisma, inspirational motivation, intellectual stimulation, and individualized consideration. Researchers have found that FRLM model significantly enhanced leaders' performances, as well as stimulate subordinates' achievement [40-42].

Transformational Leadership

Transformational leaders are defined as someone who is able to inspire and leads a follower to the extent beyond common objectives [43-44]. Similarly, transformational leaders' characteristics are related to a positive behavior of the ability to amplify and stimulates an individual's behavior [33]. Four dimensions that constitute transformational leadership are; idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation [33]. Available studies also show that leadership is complex in the military setting and involved bigger accountability beyond common leaders in other public organizations [60]. Therefore, the military organization demands a leader who is able to elevate a maximum subordinates' capability [47], [61-63]. Besides, much of the previous transformational-transactional leadership researches in the military setting has favored the transformational impact [47], [62].

Transformational leadership as a basis of FRLM successfully tested and contributed to the leadership development among military leaders [45-46]. Studies on transformational leadership, among that positively influenced lower ranks soldiers in Spanish

Army [47] and the Malaysian Army [48]. According to [18], there have been a proposition antecedent that could influence hardiness of the military subordinates' hardiness, and part of the possible predictor is the military leader's leadership styles. Similarly, it was highlighted earlier by [17] that proposed a similar concept. A recent study also in Italian white collar's employees has recognized the roles of transformational leadership that positively influence hardiness [33]. Therefore, the present study posits the following hypotheses.

H 1: Transformational leadership will provide a positive impact on soldier's hardiness.

Transactional Leadership

Compared to transformational leadership, transactional leaders offered designated followers with specific rewards, and benefits in achieving a common desired objective [55]. The basis of transactional leadership is the exchange processes between a leader, and a follower [34], [46]. According to [46], in certain circumstances, leaders can be perceived as having both styles of transformational as well as transactional practices. Transactional leaderships comprise of three components; contingent reward, active management by exception, and passive management by exception [38], [56]

The contingent reward is established through an exchange process between a leader and his followers. It refers to the existence of contractual obligations between both parties, which is based on either physical or psychological rewards [57], and concerns with leaders whose rewards-effort is exchanged with the subordinates [58]. Active management-by-exception refers to active prevention subordinates' failures in meeting desired objectives [59]. On the other hand, passive management-by-exception involves leaders' response only when the problems happen [60]. Besides, some studies discovered the more significant influence of transactional leadership, over the transformational effect, like the effect on Tanzanian headmasters' commitment [61].

To further validate the previous results on the effects of transactional leadership, the present work is to investigate the impact of the unit commander's transactional leadership styles on the soldier's hardiness level. The present effort is also responded as to the proposition by [17-18] as explained in the earlier section. Hence present study hypothesized the following proposition.

H 2: Transactional leadership will provide a positive impact on soldier's hardiness.

METHODOLOGY

Population and Sample

The population of this study consist of personnel of the Malaysian Army Field Command West (AFCW)

that consist of more than forty thousand soldiers. AFCW comprises three divisions; 1st Infantry Division, followed by 2nd Infantry Division, and finally 3rd Infantry Division. This study uses purposive, non-probability convenient sampling, a sample of soldiers from the 1st Battalion of Border Regiment used for Experiment 1, whereas soldiers from 2nd Battalion of Border Regiment was used for Experiment 2. These two combat infantry battalion units were chosen based on their significant forward operational schedule. The units come under command of the 2nd Infantry Division which is in line with the present study problem statement with regards to the strength and forward deployment intensity. This exposes them to a greater level of stress. Besides, based on three identified rules to determine the size of the sample; [62] specified that research requires five times of total research instruments that lead to 51 items times five. This ends up with 255 participants for both experiments. On the other hand, [63] explained the G Power sample size rules, with effect size $f^2 = 0.25$, $\alpha = 0.05$, Power = 0.95, Number of predictors = 2; this study required at least 88 participants per experimental group, to make a total of minimum 176 participants for both experiments. Nevertheless, the appropriate sample size with bigger participants increases the reliability and validity of the samples. Therefore, based on the post hoc F test with a sample size of 150 per experiment, there was an increase in the power effect to $1 - \beta = 0.99$. Meanwhile, considering all the rules stated above, the present study has initial 184 participants for experiment 1 (transformational leadership vignette), and 149 participants for experiment 2 (transactional leadership vignette). However, as a result of data screening, the final sample size for the present study is 169 for Experiment 1, and 143 for Experiment 2

Experimental Design

This is a two leadership styles experiment; transformational and transactional experimental design. The experiment used EVM to manipulate leadership styles. The vignette was adapted from the work of [64] to fit the MA context. As highlighted by previous scholars, majorities of leadership research were conducted based on a cross-sectional approach [42], [60], with some scholars raising concerns about the strength of internal causality [65]. The quasi-experimental approach is to address the issues of internal validity in the causal relationship between predictive and dependent variables [66-68].

Instrument Development

The present study adapted its research instruments from an established item that has been successfully utilized by previous researches. Conversely, the leadership vignettes were adapted from [64]. Measurements for leadership styles adapted from

MLQ 6S [69-70], authorized by Mind Garden. MLQ 6S has been applied in a variety of recent research disciplines and proved to be reliable instruments [71-73]. Finally, hardiness Dispositional Scale 15 (DRS 15) was adapted from [74], and authorized by MHS Inc.

The research measurements were validated by four experts; two experts from a military academician and language expert, and two experts from a related senior academician. This expert's composition is sufficient, as explained by [75]. More so, since the original instruments were developed in English, thus a forward, and back-translation procedure as suggested by [76] was conducted by relevant experts. The similar process was also applied to the development of two leadership styles vignette, that eventually went through two pilot study for the reliability and validity process.

On top of that, this study utilizes transformational leadership as a unidimensional construct that has successfully conducted in many contexts [52], [77-78]. While [43] has also recognized the unidimensional research on transactional leadership study.

Pilot Test

Two pilot study was conducted, that emphasis on leadership intervention validity. The first and second test was conducted on 5th April 2019, and 25th to 26th April respectively at 15th Battalion, Royal Malay Regiment, and Malaysian Army College, School of Non-Commission Officers. Pre-test on hardiness first collected, followed by post-test data collected as a result of leadership paper vignettes in order to determine the effectiveness of leadership experiments, that involved 50 participants for Pilot first test, and 45 participants for the second test. However, these two-pilot test experiments also took into consideration the third component of FRLM; the Laissez-Faire leadership.

The objective of considering the third style of leadership is to increase the reliability of leadership paper vignettes and to provide a bigger scope of leadership test among the soldiers in developing the leadership vignettes. Conversely, the first pilot test recorded a non-significant difference of the leadership intervention, due to the several setbacks in developing the paper vignettes, as well as the arrangements of research experiments. Subsequently, several enhancements of the methodology and refinement on leadership paper vignettes were conducted for the second pilot test, and the ANOVA as Table 1, while descriptive statistics in Table 2 shown the mean value for transformational and transactional leadership is valid. As highlighted in Table 2, for transformational experiment, the transformational mean value = 4.744 is higher than transactional and Laissez-Faire, with significance different, $p = 0.000$. Similarly, the manipulation checks for transactional

experiment has shown a positive effect, with transactional mean = 4.178, and $p = 0.014$.

Table 1: ANOVA Result for First Second-Test

		Sum of Squares	Df	Mean Square	F	Sig.
Transformational	Between Groups	20.453	2	10.226	17.464	.000
	Within Groups	24.594	42	.586		
	Total	45.047	44			
Transactional	Between Groups	7.004	2	3.502	4.774	.014
	Within Groups	30.807	42	.734		
	Total	37.811	44			
Laissez-Faire	Between Groups	8.079	2	4.040	4.865	.013
	Within Groups	34.874	42	.830		
	Total	42.953	44			

Table 2: Descriptive For Second Pilot-Test

		N	Mean
Transformational Experiment	Transformational Vignette	15	4.744
	Transactional Vignette	15	3.978
	Laissez-Faire Vignette	15	3.094
Transactional Experiment	Transformational Vignette	15	4.089
	Transactional Vignette	15	4.178
	Laissez-Faire Vignette	15	3.300
Laissez-Faire Experiment	Transformational Vignette	15	2.978
	Transactional Vignette	15	4.000
	Laissez-Faire Vignette	15	3.644

Based on second pilot test, the present research decided to examine two leadership styles; transformational, and transactional leadership due to the failure of manipulation in the Laissez-Faire experiment. The final measurements for current study consist of both leadership styles vignettes, that were used as experimental intervention. The hypotheses were tested using the pre-test and post-test of hardiness based on validated manipulation checks on the leadership paper vignettes.

PROCEDURE

Ethical Approval

The present study of ethical consent is granted by the researcher institution, University of Malaya Research Ethics Committee (UMREC). Prior to the data collection, permission was obtained from; 1) Headquarters of 30th Malaysian Border Brigade for experimental study, 2) commanding officer of identified Infantry Combat Unit; 1st and 2nd Battalion of Border Regiment were also coordinated. Experiment 1 of transformational leadership pre-test was conducted on 6th May 2019 at 1st Border Regiment, while the post-test with leadership intervention was conducted on the following day, 7th May 2019. On the other hand, Experiment 2 for transactional leadership pre-test

was conducted earlier at 2nd Border Regiment on 4th May 2019, and similar arrangement for one-day gap for post-test on 5th May 2019.

Experiment Procedure

Participants of both experiments were selected from an assembly of the selected infantry battalion and guided to the experiment site with individuals designated seats for the pre-test. This experiment was conducted in multiple stages. The MA subordinates who were involved as experimental participants were asked to carefully read the instructions on every stage in order to guide them on what steps should be undertaken. The experiment was conducted in different site for transformational leadership (Experiment 1) and transactional leadership (Experiment 2). Every seating position was marked with serial number tagged, and eventually all soldiers or experiment participants were issued personal tag that marked a serial number that matched with their seating position.

The serial numbers were printed on the survey as well. The researcher provided necessary instructions through verbal explanation and screen displays that sufficiently covered the experimental vignettes. Pre-test sessions only involved self-rating of hardiness level. Participants were told to be back at the same seating position next day for post-test sessions based

on a marked seating position and their individual's tagging. Meanwhile, the post-test was conducted strictly under the supervision and control of the researcher, and experimental participants were issued leadership styles paper vignettes. This was given on paper and displayed on a screen as well. Afterward, upon completion of reading and understanding the assigned leadership vignette, the

soldiers were asked to respond to the FRLM leadership survey items which served as the manipulation check. They were then asked to respond to hardiness items in view of the leader's style in the assigned vignette. Figure 1 explains the overall experiment stages. All the pre-test and post-test survey data were matched based on the specific serial numbers printed on the surveys.

Experimental Stage	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Transformational/ Experiment 1	Experimental participants selected from battalion assembly	Allocation of seating position and individuals tagged/serial numbers	Self-rating on hardiness	Participants read and rating of leadership styles	Self-rating on hardiness
Transactional/ Experiment 2					
Day	Day 1		Day 2		

Figure 1: Flowchart outlines the stages of experimental procedure.

RESULTS

Relevant measures to identified missing data, errors of data entry, and outliers were conducted. As a result of outlier's test, and as suggested by [79], Z score > 3.2 as outliers, several items have been identified as outliers, that lead to the removal of 15 participants from Experiment 1, and 6 participants from Experiment 2 due to the outliers and Z score issues.

Normality

The normality test conducted prior to the following data analysis is to confirm whether the data is normally distributed [62]. On the other hand, Skewness and Kurtosis test was conducted to analyze the normality of the data samples. According to [80], the range of Skewness and Kurtosis that fell between a range of -2 to 2 is considered as normal data. Based on the result, the skewness value for all research instruments is -0.80 to 0.66, and kurtosis is -1.03 to 0.93 confirmed the normality of the present research data.

Profile of Experimental Participants

The current study demographic analysis consists of rank, age, and period of service of the research participants. With regards to Experiment 1, the

majority of the respondent's rank is Private (41.4%), followed by Corporal (30.8%) and Lance Corporal (22.5%) respectively. The rank group percentage is Sergeant which consists of only 5.3%. Besides, the age group of 19 to 25 years old scored the highest percentage (44.4%), followed by 26 to 30 years (21.3%) and 36 to 40 years (13.6%) respectively. The lowest percentage of the age group is 41 years and above (9.5%). Third demographic is period of service, with less than 5 years scored the highest percentage (49.7%), then 6 to 10 years (17.8%), while 16 to 20 years' service is 15.4%, and 11 to 15 years (14.8%) is slightly lower, with period of service more than 21 years represented by only 2.4% of respondents.

In reference to Experiment 2, the highest rank group is also a Private (49.7%), followed by Corporal (25.9%) and Lance Corporal (22.4%) respectively. The lowest age group is Sergeant 2.1%. Age group is a second characteristic, 19 to 25 years old is the highest component (37.1%), followed by a slightly higher percentage (37.8%) for 26 to 30 years, and 31 to 35 years is 11.2%, while 36 to 40 years and 41 years old above is represented by similar percentage (7%). The profile of respondents for both groups was not significantly different.

Table 3: Demographic Profile

Demographic Profile	Experiment 1		Experiment 2	
	n	%	n	%
1 Rank group				
Sergeant	9	5.3	3	2.1
Corporal	52	30.8	37	25.9
Lance Corporal	38	22.5	32	22.4
Private	70	41.4	71	49.7
2 Age group				

	19 to 25 years	75	44.4	53	37.1
	26 to 30 years	36	21.3	54	37.8
	31 to 35 years	19	11.2	16	11.2
	36 to 40 years	23	13.6	10	7.0
	41 years above	16	9.5	10	7.0
3	Period of Service in the Army				
	Less than 5 years	84	49.7	67	46.9
	6 to 10 years	30	17.8	40	28.0
	11 to 15 years	25	14.8	20	14.0
	16 to 20 years	26	15.4	15	10.5
	More than 21 years	4	2.4	1	0.7

Experiment 1, $n = 169$, and Experiment 2, $n = 143$ participants.

Manipulation Checks

Independent t-test was utilized to examine the effect of leadership interference for both experiments, and the results is as shown in Table 3. Manipulation check was conducted to determine the success of leadership manipulation via EVM. As expected, transformational leadership was rated significantly

higher in Experiment 1; mean = 4.583, in comparison to transactional leadership mean = 3.670, and $p = 0.00$. Similarly, transactional leadership was rated significantly higher, mean 4.567 in Experiment 2 in comparison to transformational leadership mean = 4.084, with $p = 0.00$.

Table 6: Result for Manipulation Checks

Leadership Vignettes		N	Mean	SD	t	df	sig.
Experiment 1	Transformational	169	4.583	0.588	12.789	310	0.000
	Transactional	143	3.670	0.674			
Experiment 2	Transformational	169	4.084	0.655	-6.529	310	0.000
	Transactional	143	4.567	0.646			

Mean Comparison Between Pre-Test and Post-Test of Hardiness

Specific comparison between pre-test and post-test of hardiness were analyzed to determine if there was a significant change in soldiers' hardiness after being exposed to different leadership style. In summary, from the below Table 7, it is clearly depicted that the transformational leadership styles of the MA unit commanders have significantly affected and provides a positive effect of the soldiers' hardiness level. The mean value for post-test increased by 1.0, with pre-test mean = 2.81, S.D

= 0.32 as compared to post-test mean = 3.81, S.D = 0.71, with sig level at $p = 0.00$. On the other hand, the independent t-test analysis shows that transactional leadership does not provide a significant impact on soldiers' hardiness. There was no significance difference between the post-test score (mean = 2.87, SD = 0.53) and the pre-test score (mean = 2.88, SD = 0.30) with $p = 0.752$. Hence, this study supported the hypotheses 1, while hypotheses 2 was rejected.

Table 7: Mean Comparison of Hardiness for Both Experiment

Leadership Code		Mean	N	SD	t	df	sig.
Experiment 1	Hardiness pre-test	2.81	169	0.32	-17.992	168	0.000
	Hardiness post-test	3.81	169	0.71			
Experiment 2	Hardiness pre-test	2.88	143	0.30	0.316	142	0.752

DISCUSSION

The MA has gone through significant development as a result of global military transformation and the evolution of threat perception as part of RMA, thus increase the operational intensity among combat units [9]. The present challenges have led to the issues of stress and commitment among the soldiers [10].

As such, the military nature of mission execution was complicated and stress in nature as explained by the VUCA concept [13], while hardiness has been recognized as personality resilience that acts as a buffer to the negative impact of stress [21-22].

[17-18] proposed the military leaders can play a role in influencing soldier's hardiness. However, this proposition has not been empirically tested. This study addressed the gap and investigated the influence of transformational-transactional leadership on soldier's hardiness.

The present study has exhibited that the hardiness theory has significant effects as a result of the transformational leadership behaviour of the MA unit commanders. Thus, hardiness is significantly affected by transformational leadership styles. Unit commanders' transformational behaviour, such as the ability to ideally influence soldiers' motivation, transcend the subordinate's capability beyond their standard practices, and achievement is essential in the modern military job environment. On top of that, current work has contributed to the additional knowledge of the positive impact of transformational leadership, as compared to transactional leadership based on experimental research, which increased the internal reliability of current findings.

CONCLUSION

In capping, as said earlier the present study attempts to prove that the leadership styles of transformational could provide a significant positive impact on military subordinate hardiness. Based on the comparison between pre-test and post-test of hardiness, the objective of the present study is achieved as findings show that the effect of transformational leadership vignette intervention, Pre-test $M = 2.81$, as compared to post-test $M = 3.81$, with $p = 0.000$. However, in regard to transactional leadership, it did not significantly affect soldier's hardiness, as the pre-test and post-test mean difference is decreased by 0.01, and $p = 0.752$. Overall, the nexus of unit commander's leadership styles and hardiness is the significant concept, hence answers the hypotheses of the present study that leadership styles of the MA unit commanders have a positive impact on subordinates' hardiness level, confirming previous study hardiness theory as adapted in the present study that military nature of

mission execution was complicated and stress in nature [13].

Theory Implications

These findings have a significant contribution to the hardiness theory, extending the previous notion of psychological hardiness that predicts an effective military leaders' development [14-15], and that a military person performed better in a stressful environment, based on the fact that hardiness in the MA affected by the unit commander's transformational leadership styles.

REFERENCES

- [1] Defense Planning Department MAF Headquarters. (2016). 4D MAF - 4 Dimension of Malaysian Armed Forces.
- [2] Malaysian Army. (2006). Malaysian Army Transformation Plan. Army Training and Doctrine Command.
- [3] Cohen, E. A. (1996). A Revolution in Warfare. *Foreign Affairs*, 75(2), 37.
- [4] Newmyer, J. (2010). The revolution in military affairs with Chinese characteristics. *Journal of Strategic Studies*, 33(4), 483-504.
- [5] Jensen, B. M. (2018). The role of ideas in defense planning: revisiting the revolution in military affairs. *Defence Studies*, 18(3), 302-317.
- [6] Rahman, A. I. (2018). National Defence Policy Lecture. Policy Planning and Security Unit MINDEF.
- [7] Abdullah, H. (2017). Resolusi Program Collaboration Call Pegawai Memerintah Pemerintahan Medan Barat Tentera Darat dan Trup Tentera Darat Siri 1/2017.
- [8] Shukuri Ahmad. (2016). Resolusi Program Collaboration Call Pegawai Memerintah Pemerintahan Medan Barat Tentera Darat dan Trup Tentera Darat Siri 1/2016.
- [9] Mohamed Saari Omar. (2016). Jadual Operasi Markas Pemerintahan Medan Barat. Markas Pemerintahan Medan Barat Tentera Darat.
- [10] Kadir, K. A. A. (2018). Penyata Anggota Tentera Darat Menamatkan Perkhidmatan. Biro Bakal Pesara, Cawangan Sumber Manusia, Markas Tentera Darat.
- [11] Bartone, P. T., Kelly, D. R., & Matthews, M. D. (2013). Psychological hardiness predicts adaptability in military leaders: A prospective study. *International Journal of Selection and Assessment*, 21(2), 200-210.
- [12] Johnsen, Bjørn H., Hystad, S. W., Bartone, P. T., Laberg, J. C., & Eid, J. (2014). Hardiness Profiles: Defining Clusters of the Dispositional Resilience Scale and Their Relation to Soldiers' Health. *Military Behavioral Health*, 2(2), 123-128.

- [13] Greeves, J., Nindl, B. C., Friedl, K. E., Billing, D. C., Drain, J. R., Reilly, T., Young, A. J. (2018). Perspectives on resilience for military readiness and preparedness: Report of an international military physiology roundtable. *Journal of Science and Medicine in Sport*, 21(11), 1116–1124.
- [14] Kelly, D. R., Matthews, M. D., & Bartone, P. T. (2014). Grit and hardiness as predictors of performance among West Point cadets. *Military Psychology*, 26(4), 327–342.
- [15] Maddi, S. R., Matthews, M. D., Kelly, D. R., Villarreal, B. J., Gundersen, K. K., & Savino, S. C. (2017). The continuing role of hardiness and grit on performance and retention in west point cadets. *Military Psychology*, 29(5), 355–358.
- [16] Eid, J., Helge Johnsen, B., Bartone, P. T., & Arne Nissestad, O. (2007). Growing transformational leaders: exploring the role of personality hardiness. *Leadership & Organization Development Journal*, 29(1), 4–23.
- [17] Bartone, P. T. (2006). Resilience under military operational stress: Can leaders influence hardiness? *Military Psychology*, 18(SUPPL.), 131–149.
- [18] Bartone, P. T. (2012). Social and organizational influences on psychological hardiness: How leaders can increase stress resilience. *Security Informatics*, 1(1), 21.
- [19] Hystad, S. W., Olsen, O. K., Espevik, R., & Säfvenbom, R. (2015). On the stability of psychological hardiness: A three-year longitudinal study. *Military Psychology*, 27(3), 155–168.
- [20] Harms, P. D., Credé, M., Tynan, M., Leon, M., & Jeung, W. (2017). Leadership and stress: A meta-analytic review. *Leadership Quarterly*, 28(1), 178–194.
- [21] Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37(1), 1–11.
- [22] Kobasa, S. C. (1982). Commitment and coping in stress resistance among lawyers. *Journal of Personality and Social Psychology*, 42(4), 707–717.
- [23] Dohrenwend, B.S. and Dohrenwend, B. P. (Eds.). (1974). *Stressful life events: Their nature and effects*. New York: Wiley.
- [24] Bartone, P. T. (1999). Hardiness Protects Against War-Related Stress in Army Reserve Forces. *Consulting Psychology Journal*, 51(2), 72–82.
- [25] Maddi, S.R. & Kobasa, S. C. (1984). *The Hardy Executive: Health Under Stress*. Homewood, IL: Dow Jones-Irwin.
- [26] Hystad, S. W., Eid, J., Laberg, J. C., & Bartone, P. T. (2011). Psychological hardiness predicts admission into Norwegian Military Officer Schools. *Military Psychology*, 23(4), 381–389.
- [27] Bartone, P. T., Johnsen, B. H., Eid, J., Hystad, S. W., & Laberg, J. C. (2017). Hardiness, avoidance coping, and alcohol consumption in war veterans: A moderated-mediation study. *Stress and Health*, 33(5), 498–507.
- [28] Bartone, P. T., Roland, R. R., Picano, J. J., & Williams, T. J. (2008). Psychological hardiness predicts success in US Army special forces candidates. *International Journal of Selection and Assessment*, 16(1), 78–81.
- [29] Lo Bue, S., Taverniers, J., Mylle, J., & Euwema, M. (2013). Hardiness promotes work engagement, prevents burnout, and moderates their relationship. *Military Psychology*, 25(2), 105–115.
- [30] Olsen, O. K., & Espevik, R. (2017). Moral antecedents of authentic leadership: Do moral justice reasoning, self-importance of moral identity and psychological hardiness stimulate authentic leadership? *Cogent Psychology*, 4(1), 1–13.
- [31] Thomassen, Å. G., Hystad, S. W., Johnsen, B. H., Johnsen, G. E., Laberg, J. C., & Eid, J. (2015). The combined influence of hardiness and cohesion on mental health in a military peacekeeping mission: A prospective study. *Scandinavian Journal of Psychology*, 56(5), 560–566.
- [32] Morath, R. A., Leonard, A. L., & Zaccaro, S. J. (2011). Military leadership: An Overview and Introduction to the special issue. *Military Psychology*, 23(5), 453–461.
- [33] Mazzetti, G., Vignoli, M., Petruzzello, G., & Palareti, L. (2019). The harder you are, the healthier you become. May hardiness and engagement explain the relationship between leadership and employees' health? *Frontiers in Psychology*, 9(JAN), 1–9.
- [34] Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- [35] Bass, B., & Avolio, B. (1997). *Full-range of leadership development: Manual for multifactor leadership questionnaire*. Palo Alto: CA Mind Garden.
- [36] Bass, Bernard M. (1990). *Bass & Stogdill's Handbook of Leadership: Theory, Research & Managerial Applications*.
- [37] Kirkbride, P. (2006). Developing transformational leaders: the full range leadership model in action. *Industrial and Commercial Training*, 38(1), 23–32.
- [38] Northouse, P. G. (2016). *Leadership: Theory and Practice (Seventh Ed)*. SAGE Publications.
- [39] Dartey-Baah, K. (2015). *Resilient leadership: a transformational-transactional leadership*

- mix. *Journal of Global Responsibility*, 6(1), 99–112.
- [40] Ivey, G. W., & Kline, T. J. B. (2010). Transformational and active transactional leadership in the Canadian military. *Leadership and Organization Development Journal*, 31(3), 246–262.
- [41] Swid, A. (2014). Police members perception of their leaders' leadership style and its implications. *Policing: An International Journal of Police Strategies & Management*, 37(3), 579–595.
- [42] Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2013). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *Leadership Quarterly*, 25(1), 36–62.
- [43] Curtis, G. J. (2018). Connecting influence tactics with full-range leadership styles. *Leadership and Organization Development Journal*, 39(1), 2–13.
- [44] Gunter, H. (2010). Full Range Leadership Development. *Educational Management Administration & Leadership*, 38(January 2016), 396–397.
- [45] Robbins, S. P., & Coulter, M. (2005). *Management* (8th Ed). Pearson Education, Inc.
- [46] Bass, B.M. (1985). *Leadership and Performance Beyond Expectations*. The Free Press, New York, NY.
- [47] Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit-performance. *Journal of Applied Psychology*, 78(6), 891–902.
- [48] Morath, R. A., Leonard, A. L., & Zaccaro, S. J. (2011). Military leadership: An Overview and Introduction to the special issue. *Military Psychology*, 23(5), 453–461.
- [49] García-Guiu, C., Moya, M., Molero, F., & Moriano, J. A. (2016). Transformational leadership and group potency in small military units: The mediating role of group identification and cohesion. *Revista de Psicología Del Trabajo y de Las Organizaciones*, 32(3), 145–152.
- [50] Kane, T. D., & Tremble, T. R. (2000). Transformational leadership effects at different levels of the army. *Military Psychology* (Taylor & Francis Ltd), 12(2), 137–160.
- [51] Laurence, J. H. (2011). Military leadership and the complexity of combat and culture. *Military Psychology*, 23(5), 489–501.
- [52] Gyensare, M. A., Anku-Tsedede, O., Sanda, M.-A., & Okpoti, C. A. (2016). Transformational leadership and employee turnover intention. *World Journal of Entrepreneurship, Management and Sustainable Development*, 12(3), 243–266.
- [53] Tremblay, M. A. (2010). Fairness perceptions and trust as mediators on the relationship between leadership style, unit commitment, and turnover intentions of Canadian forces personnel. *Military Psychology*, 22(4), 510–523.
- [54] Inderjit, S., Wen, K. F., Ong, J., Liaw, H., Ismail, Z., & Yaacob, S. (2018). The Perspective and Outcomes of Leadership Style of Middle Managers in the Malaysian Army. *International Journal of Business and Management*, 2(1), 49–57.
- [55] Kunhert, K. W., & Lewis, P. (1987). Transactional and Transformational Leadership: A Constructive / Developmental Analysis. *Academic of Management Review*, 12(4), 648–657.
- [56] Gary Yukl. (2006). *Leadership in Organizations* (7th Edition). Pearson Prentice Hall.
- [57] Bass, Bernard M. (1999). Two Decades of Research and Development in Transformational Leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9–32.
- [58] Walumbwa, F. O., Wu, C., & Orwa, B. (2008). Contingent reward transactional leadership, work attitudes, and organizational citizenship behavior: The role of procedural justice climate perceptions and strength. *Leadership Quarterly*, 19(3), 251–265.
- [59] Prasad, B., & Junni, P. (2016). CEO transformational and transactional leadership and organizational innovation. *Management Decision*, 54(7), 1542–1568.
- [60] Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755–768.
- [61] Nguni, S., Slegers, P., & Denessen, E. (2006). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools: The Tanzanian case. *School Effectiveness and School Improvement*, 17(2), 145–177.
- [62] Hair, J.F. Jr, Black, W.C., Babin, B.J. and Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Prentice Hall.
- [63] Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191.

- [64] Levy, Cober, R. T., & Miller, T. (2002). The Effect of Transformational and Transactional Leadership Perceptions on Feedback-Seeking Intentions. *Journal of Applied Social Psychology*, 32(8), 1703–1720.
- [65] Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. Houghton Mifflin.
- [66] Aguinis, H., & Edwards, J. R. (2014). Methodological wishes for the next decade and how to make wishes come true. *Journal of Management Studies*, 51(1), 143–174.
- [67] Schram, A. (2005). Artificiality: The tension between internal and external validity in economic experiments. *Journal of Economic Methodology*, 12(2), 225–237.
- [68] Sekaran, U., & Bougie, R. J. (2016). *Research Methods for Business: A Skill Building Approach*. New York: John Wiley & Sons, Ltd.
- [69] Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of Occupational and Organizational Psychology*, 72(4), 441–462.
- [70] Tejada, M. J., Scandura, T. A., & Pillai, R. (2001). The MLQ revisited psychometric properties and recommendations. *Leadership Quarterly*.
- [71] Al-Hussami, M., Hammad, S., & Alsoleihat, F. (2018). The influence of leadership behavior, organizational commitment, organizational support, subjective career success on organizational readiness for change in healthcare organizations. *Leadership in Health Services*, 30(2), 1751–1879.
- [72] Baek, H., Byers, E. H., & Vito, G. F. (2018). Transformational leadership and organizational commitment in Korean police station. *International Journal of Police Science & Management*, 20(2), 155–170.
- [73] Sahu, S., Pathardikar, A., & Kumar, A. (2017). Transformational leadership and turnover. *Leadership & Organization Development Journal*, 39(1), 82–99.
- [74] Bartone, P. T. (1995). A short hardiness scales. Paper Presented at the Meeting of the American Psychological Society, New York, NY.
- [75] Grove, S. K., Gray, J. R., & Burns, N. (2013). *The Practice of Nursing Research Appraisal, Synthesis, and Generation of Evidence* (Seventh Ed). Elsevier.
- [76] Behling, O., & Law, K. S. (2000). *Translating questionnaires and other research instruments: Problems and solutions*. Thousand Oaks, CA: Sage Publications.
- [77] Luo, Z., Marnburg, E., & Law, R. (2017). Linking leadership and justice to organizational commitment. *International Journal of Contemporary Hospitality Management*, 29(4), 1167–1184.
- [78] Yizhong, X., Baranchenko, Y., Lin, Z., Lau, C. K., & Ma, J. (2019). The influences of transformational leadership on employee employability: Evidence from China. *Employee Relations*, 41(1), 101–118.
- [79] Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics* (5th Edition). Boston: MA Pearson.
- [80] George, D., & Mallery, M. (2010). *SPSS for Windows Step by Step: A Simple Guide and Reference*, 17.0 update (10a ed.). Boston: Pearson.