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 hardness level. The results from the two experiments found that transformational leadership significantly affected subordinate military hardness, while transactional leadership had no influence on hardness. 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
Army Captain in the US Army [11], and Norwegian Navy Cadets [16]. Besides, there has been a debate within the theoretical context of hardness, 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 hardness [17-18]. For instance, [19] found a significant empirical longitudinal evidence, although, there has been no change in the level of hardness in three years of cadet training, a difference in cadet's hardness variances, in which some of the cadets have shown the increase of hardness were identified during the training processes. These shows that hardness can be developed. Hence, this study will explore the possibility of the unit commander’s leadership influences on the soldier’s hardness level.

Nevertheless, despite the significant numbers of studies that have been conducted over time regarding hardness 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 hardness. Moreover, the present research found that there has been no hardness 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 hardness [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 hardness 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 hardness, 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 hardness in the military environment showed that psychological hardness 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 hardness and soldier’s performance; for instance, the rate of officer’s cadet retention from training was related by their hardness level [15]. A longitudinal seven years research confirmed that hardness predicted leadership performance in their assigned unit United States (US) [11]. In another research, hardness 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 hardness level of the soldiers is related to dedication and vigor [29].

Studies within the western military recognized hardness as factors among cadet performance in the US and Norway [11], [30], and authentic leadership correlates with hardness [31]. Similarly, few studies also supported the idea of how hardness 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' hardness, as conceptually proposed by [17-18]. Evidently, hardness plays an important role in influencing an employee’s commitment and performance. This raises the question on what can be done to individual employees’ hardness.

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' hardness level [33]. This study has proved that hardness 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 hardness 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,
transformational 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 hardness of the military subordinates’ hardness, 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 hardness [33]. Therefore, the present study posits the following hypotheses.

**H 1:** Transformational leadership will provide a positive impact on soldier’s hardness.

**Transaction 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].

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 hardness 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 hardness.

**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, hardness 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 hardness 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**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
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<td>Transformational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
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<td>2</td>
<td>10.226</td>
<td>17.464</td>
<td>.000</td>
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<tr>
<td>Within Groups</td>
<td>24.594</td>
<td>42</td>
<td>.586</td>
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<td>Total</td>
<td>45.047</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Transactional</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>7.004</td>
<td>2</td>
<td>3.502</td>
<td>4.774</td>
<td>.014</td>
</tr>
<tr>
<td>Within Groups</td>
<td>30.807</td>
<td>42</td>
<td>.734</td>
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<tr>
<td>Total</td>
<td>37.811</td>
<td>44</td>
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<td></td>
<td></td>
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<tr>
<td>Laissez-Faire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
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<td>2</td>
<td>4.040</td>
<td>4.865</td>
<td>.013</td>
</tr>
<tr>
<td>Within Groups</td>
<td>34.874</td>
<td>42</td>
<td>.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>42.953</td>
<td>44</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Table 2: Descriptive For Second Pilot-Test**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
</tr>
<tr>
<td>Experiment</td>
<td>15</td>
<td>4.744</td>
</tr>
<tr>
<td>Transformational Vignette</td>
<td>15</td>
<td>3.978</td>
</tr>
<tr>
<td>Laissez-Faire Vignette</td>
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<td>3.094</td>
</tr>
<tr>
<td>Transactional</td>
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<td></td>
</tr>
<tr>
<td>Experiment</td>
<td>15</td>
<td>4.089</td>
</tr>
<tr>
<td>Transformational Vignette</td>
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<td>4.178</td>
</tr>
<tr>
<td>Laissez-Faire Vignette</td>
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<td>3.300</td>
</tr>
<tr>
<td>Laissez-Faire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiment</td>
<td>15</td>
<td>2.978</td>
</tr>
<tr>
<td>Transformational Vignette</td>
<td>15</td>
<td>4.000</td>
</tr>
<tr>
<td>Laissez-Faire Vignette</td>
<td>15</td>
<td>3.644</td>
</tr>
</tbody>
</table>

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 hardness 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.

<table>
<thead>
<tr>
<th>Experimental Stage</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
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</thead>
<tbody>
<tr>
<td>Transformational/</td>
<td>Stage 1</td>
<td>Allocation of seating position and</td>
<td>Self-rating on hardness</td>
<td>Participants read and rating of leadership</td>
<td>Self-rating on hardness</td>
</tr>
<tr>
<td>Experiment 1</td>
<td></td>
<td>individuals tagged/serial numbers</td>
<td></td>
<td>styles</td>
<td></td>
</tr>
<tr>
<td>Transactional/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiment 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day</td>
<td>Day 1</td>
<td></td>
<td></td>
<td>Day 2</td>
<td></td>
</tr>
</tbody>
</table>

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 (31.5%), followed by a slightly higher percentage (28.9%) 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

<table>
<thead>
<tr>
<th>Demographic Profile</th>
<th>Experiment 1</th>
<th>Experiment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>1  Rank group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sergeant</td>
<td>9</td>
<td>5.3</td>
</tr>
<tr>
<td>Corporal</td>
<td>52</td>
<td>30.8</td>
</tr>
<tr>
<td>Lance Corporal</td>
<td>38</td>
<td>22.5</td>
</tr>
<tr>
<td>Private</td>
<td>70</td>
<td>41.4</td>
</tr>
<tr>
<td>2  Age group</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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>
<thead>
<tr>
<th>Leadership Code</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>( t )</th>
<th>df</th>
<th>sig.</th>
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</thead>
<tbody>
<tr>
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<td></td>
<td></td>
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<td>Transformational</td>
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<td>4.583</td>
<td>0.588</td>
<td>12.789</td>
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<td>3.670</td>
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<tr>
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<td>4.084</td>
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</table>

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

Specific comparison between pre-test and post-test of hardness were analyzed to determine if there was a significant change in soldiers’ hardness 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’ hardness 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’ hardness. 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>
<thead>
<tr>
<th>Leadership Code</th>
<th>Mean</th>
<th>N</th>
<th>SD</th>
<th>( t )</th>
<th>df</th>
<th>sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experiment 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardiness pre-test</td>
<td>2.81</td>
<td>169</td>
<td>0.32</td>
<td>-17.992</td>
<td>168</td>
<td>0.000</td>
</tr>
<tr>
<td>Hardiness post-test</td>
<td>3.81</td>
<td>169</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Experiment 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardiness pre-test</td>
<td>2.88</td>
<td>143</td>
<td>0.30</td>
<td>0.316</td>
<td>142</td>
<td>0.752</td>
</tr>
</tbody>
</table>
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


