


Article

The Mediating Effect of Group Cohesion Modulated by Resilience in the Relationship between Perceived Stress and Military Life Adjustment

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Abstract: This study's purpose was to investigate the relationship among soldiers' perceived stress, group cohesion, military life adjustment, and resilience. Specifically, we aimed to verify the mediating effect of cohesion and the modulating effect of resilience. In addition, we examined the mediated modulating effect of resilience within the comprehensive relationship among variables. The research participants comprised 300 soldiers from two different army troops, and a total of 285 data points were analyzed, excluding unfinished responses. The main results were as follows. First, we identified the mediated effect of cohesion in the relationship between soldiers' perceived stress and their military life adjustment. Second, resilience showed a moderating effect in the relationship between soldiers' cohesion and military life adjustment. Third, while on the path of moving from perceived stress to successful military life adjustment through cohesion, resilience modulated the relationship between cohesion and military life adjustment. Lastly, in this paper, we address this study's implications and limitations.

Keywords: perceived stress; group cohesion; military life adjustment; resilience; soldiers



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1. Introduction

Soldiers must defend their homeland's territory from enemy offensives in times of war. Military life, in which offensive and defensive measures, delivering commands, and obeying superiors' instructions are essential, is often tense and stressful. Korea remains one of the few divided countries today, with South Korea imposing the duty of national defense on all male adults in compliance with the Constitution and Military Service Act. Given the prominence of military service in Korea, maintaining a healthy army is imperative; it is crucial on personal and national levels to improve soldiers' adaptation to military life.

Military life adjustment (MLA) is an overall adaptation to the military while maintaining a sense of duty, shared mission, and positive attitude toward the military [1,2]. One of the main factors affecting MLA is the stress experienced among members of military units [3–5]. Soldiers' stress includes military-specific tensions and personal pressure when perceiving individual, organizational, or environmental difficulties [2,6]. In addition, Korea's enlisted soldiers are generally between the ages of 19 and 25; naturally, they exhibit the characteristics of young adulthood. Because early adulthood is a crucial stage for achieving autonomy, establishing a sense of identity, and individual pursuits [7], soldiers experience various developmental stressors, including an uncertain future, academic achievements, interpersonal relationships, and intimacy issues.

As such, when individuals feel insecure and have no sense of security or perceive threats, their emotions affect their behavioral responses, which ultimately influence daily adjustment or maladjustment [8]. Similarly, after stressful events or traumatic experiences, people may suffer from emotional disturbances, anxiety disorders [9], and/or adjustment

disorders [10], and their subjective well-being might deteriorate [9,11,12]. Therefore, if an organization does not recognize these potential dangers and provide prompt support, its members' performance can degrade [13]. The more comprehensive these personal and environmental stresses are, the harder it is for soldiers to adapt to military life. It is, therefore, vital to identify multiple ways to cope with stress. Moreover, recent studies on stress are of growing interest in revealing the consequences of stress and psychological characteristics that can overcome and buffer stress [14].

In this study, we examined military life-related and personal variables that may affect MLA. To meet this aim, we chose group cohesion as the military life-related variable and resilience as the personal variable. By examining these variables' relationships, we sought to find a basis for improving soldiers' adjustment to military life.

Group cohesion is defined as the ability to establish trust and teamwork through members' bonds [15]. From the perspective of social identity theory, an individual's sense of self is formed based on group membership and the roles assumed by group members [16]. Therefore, people internalize a sense of group identity and develop attitudes toward members within their group [17]. Thus, it is an essential mechanism in the group's functioning and in maintaining members' mental health [18]. Furthermore, cohesion enables group members to be loyal to one another, thereby achieving goals by sharing tasks and strengthening social bonds [19–21].

Group cohesion is a vital construct, especially in the military [18]; it is an essential factor in combat effectiveness [22], affecting military performance and psychological well-being [23]. Moreover, group cohesion is part of military culture [24] and strongly correlates with individual soldiers' positive mental and physical outcomes [25]. In addition, cohesion significantly affects MLA [26,27]; it negatively correlates with suicidal ideation, mental health risks, and post-traumatic stress disorder [28–31]. Furthermore, group cohesion relates to MLA and closely relates to stress. For example, Ha et al. [27] found that the greater the soldiers' perceived stress, the lower the group cohesion. Similarly, Thomas et al. [32] reported a negative correlation between perceived harassment and group cohesion. Therefore, considering these previous studies, we predicted that soldiers' perceived stress would decrease group cohesion and, accordingly, their adaptation to military life would be more difficult.

The second protective factor we considered in our research is resilience. Resilience is defined as one's ability to overcome and respond flexibly to a risky or adverse situation, characterized by one's capacity to recover from adversity or continuous stress and to bend instead of break under extreme stress [33]. Resilience also often relates to sustainability, which is the ability to keep moving forward and maintain composure in the face of chronic adversity [33]. In particular, in long-term stressful situations, it is important to examine the role of risk factors and protective factors, including psychological resilience [34]. People with high resilience can effectively overcome their stress [35]. Moreover, we cannot overemphasize the importance of resilience in crises because it has significant practical implications for policy makers and psychologists [13]. For example, the higher the level of resilience, the better the problem-solving skills [36] and interpersonal relationships of college students [37], and the lower the degree of social maladaptation [38].

In military studies, resilience is a leading variable that positively affects one's adaptation to military life [2]. Additionally, soldiers with high resilience are likewise good at adjustment [39,40]. A primary characteristic of resilience is that it is an individual's intrapsychic resource [41] that one can improve through repeated training and effort [42]. Previous research examining the relationship between the variables that affect soldiers' adaptation to military life reported that the group with high resilience was more resistant to stressful situations and used more effective stress coping strategies [43,44].

Our prediction regarding the effect of resilience considering the variables identified in this study is as follows: The greater the level of perceived stress by soldiers, the lower their group cohesion and military life adjustment. However, as soldiers' resilience levels increase, the relationship between cohesion and adaptation to military life may improve.

In other words, resilience promotes adaptation to military life by enhancing problem-solving capacities in the middle of internal and/or external difficulties [43]. Pietrzak and Southwick [45] also found that highly resilient veterans were less affected by adverse incidents and exhibited higher levels of control and leadership than the less resilient group.

In the current study, basing our analysis on the relationship between perceived stress, cohesion, resilience, and military life adjustment, we examined the mediating effect of cohesion and the role of resilience. On these grounds, we propose the following hypotheses.

Hypothesis 1 (H1). *Cohesion will mediate the relationship between soldiers' perceived stress and military life adjustment.*

Hypothesis 2 (H2). *Resilience will moderate the relationship between cohesion and military life adjustment.*

Hypothesis 3 (H3). *Resilience will mediate the relationship between stress and military life adjustment.*

2. Methods

2.1. Participants and Procedures

The study participants comprised 300 soldiers who served in two different army units in Gyeonggi-do, Korea. Before conducting the survey, we received approval from the Institutional Review Board and visited both bases with the cooperation of the army units. We provided a sufficient explanation of the study's purpose and research protocol and informed participants about confidentiality and anonymity. Only army soldiers who voluntarily agreed to participate responded to the survey, which took about 20 minutes to complete. After, we gave a small gift to the participants.

Of the 300 distributed questionnaires, we used 285 questionnaires in the final analysis, excluding 15 incomplete surveys. The final participants ($N = 285$) were all male, and their mean age was 20.99, ranging from 19 to 29 years ($SD = 1.36$). Those aged 20 and under 22 comprised the largest group at 71.3%, and those between 22 and under 24 accounted for 17.2% of the total. The participants' service included 5–10 months (30.6%), 15 months or more (28.7%), and less than 5 months (15.7%). The soldiers' rank distribution was private first class (49.6%), corporal (32.1%), and private (10.1%).

2.2. Measures

2.2.1. The Perceived Stress Scale

To measure soldiers' perceived stress, we used the Perceived Stress Scale developed by Hyun and Lee [46]. This scale was developed specifically to measure soldiers' stress levels. The scale has 5 sub-factors and consists of 26 questions, rated on a five-point Likert scale (1 = not at all, 5 = extremely agree). The higher the sum of the scores, the higher soldiers' perceived stress level. Hyun and Lee report Cronbach's α as 0.97; in this study, it was 0.94.

2.2.2. The Military Life Adjustment Scale

Soldiers' adjustment to military life was measured using the Military Life Adjustment Scale, developed by Stouffer et al. [1], which was translated into Korean and modified by Shin [47] to align with Korea's military context. The scale consists of 26 questions with four sub-factors, and it also uses a five-point Likert scale. The higher the score, the better the level of adaptation to military life. In the study conducted by Shin, the Cronbach's α was 0.88; in this study, it was 0.91.

2.2.3. The Group Cohesion Scale

To measure soldiers' cohesion, we used the Group Cohesion Scale developed by Park [48]. This scale consists of 12 items and three sub-scales, namely, social cohesion,

task cohesion, and attachment to the group. The questions are also rated on a five-point Likert scale. The higher the score sum, the stronger is the group's cohesion. Park found Cronbach's α to be 0.89; we found it to be 0.88.

2.2.4. The Connor-Davidson Resilience Scale–Korean Version

To measure resilience, Connor and Davidson [49] developed a scale, which Baek et al. [50] translated into Korean and validated. This scale consists of 25 items and uses a five-point Likert scale (1 = not at all, 5 = extremely agree). Baek et al. reported the Cronbach's α as 0.93; we found it to be 0.95.

2.3. Data Analysis

We used IBM SPSS 21.0 and Process Macro Model 4 to analyze the data. First, descriptive statistics and correlation analysis were performed. To verify whether perceived stress affects MLA through cohesion, we used a 3-step regression analysis, which is a mediating effect analysis procedure suggested by Baron and Kenny [51]. We conducted bootstrapping to verify whether the derived indirect effect of the mediating path has statistical significance [52]. Next, to check whether resilience modulates the effect of cohesion on MLA, the predictor and outcome variables were mean-centered, and the interaction effect was verified through hierarchical regression analysis [53]. Finally, we used the model proposed by Hayes [54] to verify the mediated moderating effect.

3. Results

3.1. Descriptive Statistics and Correlation Analysis Results

To examine the interrelationship between perceived stress, group cohesion, resilience, and MLA, we conducted a correlation analysis, the results of which are presented in Table 1. Perceived stress negatively correlated with group cohesion ($r = -0.56, p < 0.01$), resilience ($r = -0.38, p < 0.01$), and MLA ($r = -0.57, p < 0.01$). Group cohesion showed a strong positive correlation with both MLA ($r = -0.73, p < 0.01$) and resilience ($r = -0.54, p < 0.01$). There was a positive correlation between resilience and MLA ($r = -0.60, p < 0.01$).

Table 1. Correlation analysis and descriptive statistics results ($N = 285$).

| Variable | Perceived Stress | Group Cohesion | Resilience | Military Life Adjustment |
|--------------------------|------------------|----------------|------------|--------------------------|
| Perceived Stress | – | | | |
| Group Cohesion | −0.56 ** | – | | |
| Resilience | −0.38 ** | 0.54 ** | – | |
| Military Life Adjustment | −0.57 ** | 0.73 ** | 0.60 ** | – |
| Mean | 2.29 | 3.53 | 3.67 | 3.15 |
| Standard Deviation | 0.78 | 0.71 | 0.72 | 0.79 |
| Skewness | 0.21 | −0.47 | −0.22 | 0.20 |
| Kurtosis | −0.53 | 0.59 | −0.01 | −0.12 |

** $p < 0.01$.

Descriptive statistics were performed to verify whether the normality of variables was satisfied. Each variable's skewness showed an absolute value of -0.47 to 0.21 ; the kurtosis showed an absolute value of -0.53 to 0.59 . Thus, the assumption of normality was satisfied, and the normal distribution suitable for analysis was also satisfied.

3.2. Verification of Mediating Effects

To examine group cohesion's influence on the relationship between perceived stress and MLA, we conducted the three-step multiple regression analysis suggested by Baron and Kenny [51]. The results are shown in Table 2. Perceived stress significantly affects group cohesion in the first stage ($\beta = -0.56, t = -11.30, p < 0.001$) and MLA in the second stage ($\beta = -0.57, t = -11.63, p < 0.001$). The amount that perceived stress influenced MLA was still significant in the third stage, but it slightly decreased ($\beta = -0.24, t = -5.05$,

$p < 0.001$). Therefore, we confirmed the partial mediating effect of group cohesion on the relationship between perceived stress and MLA.

Table 2. The mediating effect of group cohesion on the relationship between perceived stress and MLA.

| Stage | Predictor Variable | Outcome Variable | Unstandardized Coefficients | | β | t | R^2 | F |
|-------|--------------------|------------------|-----------------------------|------|---------|------------|-------|------------|
| | | | B | SE | | | | |
| 1st | Perceived Stress | Group Cohesion | −0.50 | 0.04 | −0.56 | −11.30 *** | 0.32 | 127.64 *** |
| 2nd | Perceived Stress | MLA | −0.57 | 0.05 | −0.57 | −11.63 *** | 0.33 | 135.15 *** |
| 3rd | Perceived Stress | MLA | −0.25 | 0.05 | −0.24 | −5.05 *** | 0.57 | 180.01 *** |
| | Group cohesion | MLA | 0.67 | 0.06 | 0.59 | 12.2 *** | | |

B : beta, SE: standard error, β : standardized coefficients; *** $p < 0.001$.

Next, bootstrap analysis was conducted to verify the statistical significance of the indirect effect [52]; the results are presented in Table 3. The number of re-extracted samples was 5000, and the indirect effect coefficient was −0.34. The confidence interval lower limit was −0.42 and the upper limit was −0.26. Given that the confidence interval does not include 0, mediating effect was confirmed to be statistically significant.

Table 3. Bootstrapping results of mediating effect.

| Path | Indirect Effects | | 95% Confidence Interval | |
|---------------|------------------|------|-------------------------|-------------|
| | b | SE | Lower Limit | Upper Limit |
| PS → GC → MLA | −0.34 | 0.04 | −0.42 | −0.26 |

PS: perceived stress, GC: group cohesion, MLA: military life adjustment.

3.3. Verification of Moderating Effect

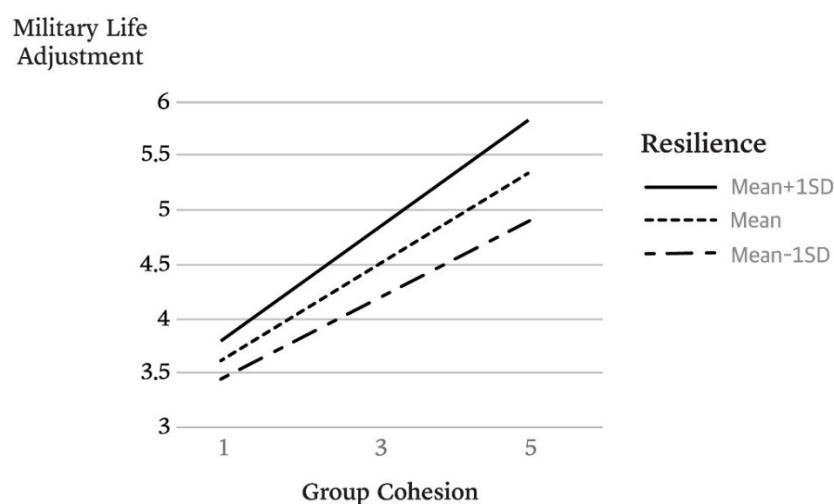
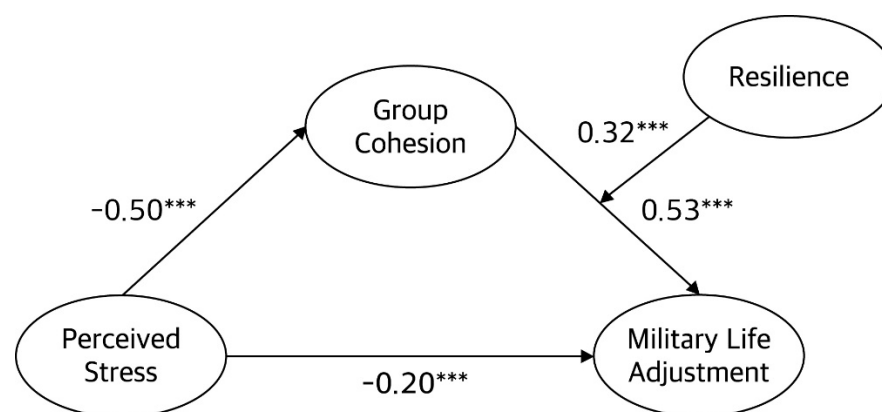
A hierarchical regression analysis was performed to determine the extent to which resilience levels affect the relationship between group cohesion and MLA; these results are shown in Table 4. First, the problem of multicollinearity in multiple regression analysis was minimized by mean-centering of group cohesion and resilience for the analysis of the moderating effect. We produced interaction terms and entered them into analysis. Specifically, group cohesion was input in the first step, group cohesion and resilience were input in the second step, and the interaction term between group cohesion and resilience was additionally input in the third step. The results suggested that the interaction term of group cohesion and resilience had a statistically significant positive effect ($B = 0.07$, $t = 2.18$, $p < 0.01$), and that the changed explanatory power was also significant ($\Delta R^2 = 0.01$, $F = 131.19$, $p < 0.001$). Therefore, these results indicated that the effect of group cohesion on MLA varies significantly depending on resilience levels, thereby substantiating the moderating effect of resilience.

In addition, we developed a graph that examines the slope pattern with a simple regression line according to the degree of change in resilience in the relationship between group cohesion and MLA (Figure 1). We divided the degree of resilience into high, medium, and low levels (mean + 1SD; mean; mean − 1SD). The results, according to each condition, are as follows: $b = 0.50$, $t(285) = 12.88$, $p < 0.001$; $b = 0.45$, $t(285) = 14.26$, $p < 0.001$; $b = 0.40$, $t(285) = 10.27$, $p < 0.01$. Figure 2 shows that the slope is steeper when group cohesion is high. These results imply that as group cohesion increases, MLA likewise increases and, furthermore, the relationship between group cohesion and MLA changes significantly depending on resilience levels. In other words, soldiers with high resilience showed an apparent effect of cohesion on MLA.

Table 4. The moderating effect of resilience on the relationship between group cohesion and MLA.

| Outcome Variable | Predictor Variable | Unstandardized Coefficients | | β | t | R^2 | ΔR^2 | F |
|------------------|--------------------|-----------------------------|------|---------|-----------|-------|--------------|------------|
| | | B | SE | | | | | |
| MLA | GC (A) | 0.58 | 0.03 | 0.72 | 17.43 *** | 0.53 | 0.53 | 303.62 *** |
| | GC (A) | 0.45 | 0.04 | 0.56 | 12.31 *** | 0.59 | 0.07 | 197.48 *** |
| | Resil (B) | 0.24 | 0.04 | 0.30 | 6.63 *** | | | |
| | GC (A) | 0.45 | 0.04 | 0.56 | 12.40 *** | | | |
| | Resil (B) | 0.25 | 0.04 | 0.32 | 7.07 *** | 0.59 | 0.01 | 137.19 *** |
| | (A) \times (B) | 0.07 | 0.02 | 0.11 | 2.72 ** | | | |

B: beta, SE: standard error, β : standardized coefficients, MLA: military life adjustment, GC: group cohesion, Resil: Resilience; ** $p < 0.01$, *** $p < 0.001$.

**Figure 1.** The moderating effect of resilience in the relationship between group cohesion and military life adjustment.**Figure 2.** The moderated mediating effect model of group cohesion. Note: *** $p < 0.001$.

Finally, we conducted bootstrapping for statistical significance verification and confirmed the conditional indirect effect of group cohesion according to resilience levels (Table 5). Given that the conditional indirect effect of group cohesion according to the effect of each level of resilience did not include 0 at the 95% confidence interval, statistical significance was confirmed. In other words, the indirect effect of group cohesion was regulated by resilience level.

Table 5. The moderated mediating effect.

| Variable | Outcome Variable: Group Cohesion | | |
|------------------|----------------------------------|------|------------|
| | B | SE | t |
| Perceived Stress | −0.50 | 0.04 | −11.29 *** |

| Variable | Outcome Variable: Military Life Adjustment | | |
|-----------------------------|--|------|-----------|
| | B | SE | t |
| Perceived Stress | −0.20 | 0.05 | −4.25 *** |
| Group Cohesion | 0.53 | 0.06 | 9.44 *** |
| Resilience | 0.32 | 0.05 | 6.52 *** |
| Group Cohesion × Resilience | 0.10 | 0.05 | 2.15 * |

* $p < 0.05$, *** $p < 0.001$.

3.4. Moderated Mediating Effect

Before verifying the moderated mediating effect, we conducted regression analysis to confirm whether the interaction term of group cohesion and resilience directly affects MLA. It was found to be not significant because B was -0.085 ($p = n.s.$). Thus, although we did not analyze the mediated moderation effect, we did design a moderated mediation model, which is presented in this paper.

We used the PROCESS Macro Model 14 proposed by Hayes [54] to examine the mediating effect of group cohesion moderated by resilience in the influence of perceived stress on MLA. Accordingly, the effect of perceived stress on MLA through group cohesion was investigated consonant with the level of resilience's indirect effect; the results are given in Table 6 and Figure 2. Perceived stress's effect on group cohesion ($B = -0.50$, $p < 0.001$) and group cohesion's effect on MLA ($B = 0.53$, $p < 0.001$) were confirmed. The statistical significance of group cohesion as a mediating variable was also corroborated. Moreover, the interaction term of group cohesion and resilience on MLA was affirmed to have a statistical significance ($B = 0.10$, $p < 0.05$). This exhibited that the effect of perceived stress on MLA through group cohesion is regulated by means of resilience level.

Table 6. Significance verification results of modulated mediating effect.

| Path | Resilience | Indirect Effects | | 95% Confidence Interval | |
|---------------|------------|------------------|------|-------------------------|-------------|
| | | b | SE | Lower Limit | Upper Limit |
| PS → GC → MLA | Mean − 1SD | −0.23 | 0.04 | −0.30 | −0.14 |
| | Mean | −0.26 | 0.04 | −0.34 | −0.19 |
| | Mean + 1SD | −0.30 | 0.05 | −0.39 | −0.21 |

PS: perceived stress, GC: group cohesion, MLA: military life adjustment.

4. Discussion

In this study, we investigated the relationship between perceived stress, group cohesion, resilience, and military life adjustment. Analyses verified the mediating effect of group cohesion and the mediated moderating effect of resilience in the relationship between variables.

First, group cohesion showed a mediating effect on the relationship between soldiers' perceived stress and MLA. That is, soldiers' perceptions of high stress can directly and significantly affect their adaptation to military life. These results support previous studies' findings that stressful events are closely related to emotional and anxiety disorders [9], adjustment disorders [10], and subjective well-being [11,12].

Furthermore, the greater the perceived stress, the lower the level of cohesion and, consequently, a lower MLA level. Cohesion is an important variable that decreases soldiers' suicidal thoughts and mental health risks [28–31]. These results align with the social identity theory that an individual's sense of self is affected by group membership and role within the group [16]. For instance, McGurk et al. [55] consider cohesion part of

military culture and an important variable influencing soldiers' healthy adaptation to military life. Based on cohesion's influence, one could say that a method for increasing soldiers' cohesion is, therefore, a method for improving their adaptation to military life. This study's results support previous findings regarding the negative influence of soldiers' perceived stress on their MLA [3,56,57] and cohesion [27,32]. In addition, these results correspond with previous studies that likewise showed significant positive correlations between soldiers' cohesion, military performance, psychological well-being, and military life adaptation [23,26,58].

Second, we set resilience as a variable that can interact with cohesion to increase soldiers' adaptation; we found a modulating effect of resilience on the relationship between cohesion and MLA. Here, we define resilience as one's capacity to cope successfully with dangerous or stressful situations [59]. With sufficient resilience, people can respond appropriately and flexibly to stressful scenarios and grow mentally through overcoming such difficulties [60]. Furthermore, resilience strengthens people's problem-solving abilities, enabling them to overcome subsequent challenges from adversity or risky situations [61,62]. The personal characteristic of having resilience, suggested in previous studies, also pertains to this study's results: the greater the resilience of soldiers, the greater the slope of adaptation to military life according to cohesion level. Therefore, we can infer that even if the cohesion level is low, an individual's resilience allows the soldier to adapt to the military organization better.

Third, we found a mediated moderating effect of resilience within the comprehensive relationship between soldiers' perceived stress, cohesion, and military life adaptation. In other words, soldiers may experience various stressors due to environmental and personal difficulties—the greater the soldiers' stress, the lower the group cohesion—which may make it difficult for them to adapt to military life. By improving soldiers' resilience, it is, therefore, possible to enhance soldiers' adaptation to military life. These results align with previous studies in that resilience promotes adaptation to military life in the face of external/internal difficulties [43,44] and shows higher levels of control and leadership [45].

Indeed, stress can cause a maladaptation to military life [2]. In contrast, high cohesion and resilience can be adaptive protective factors. Cohesion builds when group members perceive each other as loyal and reliable, thus coping and confronting stress together [63]. Therefore, as soldiers' stress increases, their cohesion decreases. Accordingly, low cohesion may cause problems adapting to military life because group cohesion is related to goal clarity and work performance [64]. However, if individual soldiers can increase their resilience, that increase will positively affect their adaptation to military life. For example, Egeland et al. [65] explain resilience as an individual's ability to change and develop while interacting with biological, psychological, and environmental factors. That is, resilience is not static but dynamic and affords one the potential to grow and develop through environmental and cultural factors or personal efforts [66]. For instance, someone with resilience tends to cope with obstacles more actively by positively re-evaluating a given situation [63]. Therefore, even if soldiers' cohesion is lowered by stress, increasing their resilience can buffer the negative effect of stress on cohesion.

5. Conclusions

The significance and implications of this study lie in how perceived stress affects soldiers' maladjustment to military life and in identifying protective factors involved in the pathway. As such, we found that soldiers' perceived stress, directly and indirectly, affected their adaptation. Furthermore, we verified the mediatory roles of group cohesion in the relationship between perceived stress and MLA. The study's findings also underline the importance of raising the group cohesion of soldiers who experience stress. To improve soldiers' overall adjustment, one must pay close attention to their stress and group cohesion. Because cohesion closely relates to work performance and adaptation to military life, it is necessary to pinpoint several methods for improving soldiers' cohesion. In addition, since soldiers' cohesion is related to positive support and stressors [55], military administrators

can help soldiers' adjustment by (1) examining the sources of stress experienced by soldiers, (2) helping to reduce stress through counseling services, and (3) intervening to build support systems and/or resources within units. We also recommend enhancing overall cohesive power through team coaching, team building, and team-based discussion [67,68].

Next, this study's importance is that soldiers' perceived stress and low cohesion negatively affect their adaptation to military life, but that, conversely, soldiers can improve their adjustment by enhancing resilience. As Kim et al. [69] point out, resilience is a variable one can develop and learn through interacting with one's environment; furthermore, it is composed of a set of characteristics, such as self-efficacy, flexibility, impulse control, empathy, bonding, and spirituality [42]. Luthar et al. [70] and Rutter [71] also argued that enhancing resilience is effective in relieving symptoms even during the onset of symptoms after experiencing psychological difficulties. As such, it will be imperative to find ways to strengthen and promote soldiers' resilience, such as implementing diverse programs. The main contents of this program are to improve the components of resilience, such as self-efficacy, flexibility, impulse control, and empathy. In addition, supportive social networking and stress relief enhance resilience [72]; it would be better if military units provided appropriate interventions at environmental and personal levels after examining soldiers' stress and military situations.

Even in cases where soldiers lack cohesion due to stress, improving their coping skills can improve their adaptation to military life. Likewise, Leve et al. [73] also stated that promoting individual resilience requires establishing a multi-dimensional cooperative system that considers individuals' various aspects. Moreover, in a stressful situation, shedding light on the role of protective factors such as resilience and risk is vital [34]. Hence, this study has theoretical and practical implications for discovering enhancements to soldiers' adaptation to military life through the interactive process of group cohesion and resilience despite the stress.

This study also has some limitations. First, the participants were conscripted soldiers from a specific region of Korea; as such, there are some limitations in generalizing these specific results to all Korean soldiers. As we did not target representative samples by sufficiently considering the unit characteristics or working environment, this further limits the generalizability of our results. Second, we used a self-report survey to gather data, which means it may be difficult to exclude entirely the possibility of receiving some socially desirable responses. Finally, additional variables not addressed in this study may affect soldiers' adaptation. Therefore, we recommend that future studies take up this topic for further examination to determine if there are other variables to explore.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to their containing information that could compromise the privacy of research participants.

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