# Contributing Factors to Israeli Soldiers' Adaptation to Military Noncombat Positions

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# ABSTRACT

#### **Objective:**

Adjusting to a military environment is a complex process, with unique demands and various stressors placed on conscripts. In this study, we examined the unique and combined contribution of the independent variables that constitute an individual soldier's personal resources—the meaningfulness of the military role and the match between expectations and the job itself; cognitive flexibility; social support; and seeking help from a mental health officer (MHO)—to the adaptation (dependent variable) of noncombat soldiers to military service.

#### Method:

The study group comprised 200 Israel Defense Forces noncombat soldiers aged 18-23 years (Mean<sub>age</sub> = 20.046 years, SD = 0.951). Of them, 107 (53.3%) had consulted a MHO. The remaining soldiers who had not consulted an MHO (n = 93, 46.5%) served as the comparison group. Research tools included the work and meaning questionnaire, the Cognitive Flexibility Scale, the Medical Outcomes Study (social support) questionnaire, and adaptation to the army questionnaire.

#### **Results:**

Adaptation to service was found to relate positively to the meaningfulness of the military role, cognitive flexibility, and social support. Social support partially mediated the relation between cognitive flexibility and adaptation to service. Additionally, soldiers who had consulted an MHO had lower levels of cognitive flexibility and social support, and they adapted less well to service compared to the comparison group.

#### **Conclusions:**

The study indicates that soldiers who seek help have lower resources. Additional personal and environmental variables that contribute to the adjustment of soldiers in noncombat positions were also identified.

#### INTRODUCTION

Adjusting to a military environment is a complex process, as unique demands and stressors are placed on individuals in this context.<sup>1</sup> The less successfully they adapt, the greater the mismatch between them and their environment: a situation that increases stressors and may lead to negative psychological experiences and poor mental well-being.<sup>2</sup>

In Israel, whose army is based on the People's Army Model,<sup>3</sup> national military service is mandatory for all Jewish and Druze Israeli citizens over the age of 18 years, regardless of sex. During the conscription process, Israel Defense Forces (IDF) personnel screen and assess all eligible recruits. This screening is based on a physical and psychiatric evaluation in which draftees are assessed by professionals to identify difficulties or problems so that their medical profiles will

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align with their military assignment. The profile determines the classification of the soldier to various units, including combat and noncombat. One reason, therefore, that adjustment is particularly complex in the IDF is that soldiers who are highly motivated for a combat role or another specific role may receive roles they have not chosen but are nonetheless required to assume. Receiving a military position in accordance with one's military profile has implications for adaptation to the IDF.

Soldiers' adaptation to military service is a topic of critical importance, as the difficulties they experience in this environment constitute a significant risk factor for suicide.<sup>4</sup> The effects of military enlistment on the adjustment of combat soldiers have been investigated in numerous studies.<sup>5,6</sup> A less explored but nevertheless significant population of enlisted soldiers comprises those serving in noncombat positions. These soldiers serve in a variety of roles, for instance, managerial, technological, and intelligence; administrative jobs; and/or support positions such as auto mechanics, drivers, or cooks. Although serving in the IDF in some form or fashion is compulsory in Israel, some of the positions (e.g., office jobs) are viewed by Israeli adolescents as less prestigious than others (e.g., combat).<sup>7</sup> Like combat soldiers, noncombat soldiers must also adapt to a new and alien environment and adjust to an unfamiliar lifestyle and stricter discipline.

Given that noncombat soldiers serve a major role in many militaries throughout the world, such as remotely piloted aircraft and intelligence positions behind the screens,<sup>8</sup> studies investigating the factors contributing to their adjustment are crucial.<sup>9</sup> This study is based on Deci and Ryan's selfdetermination theory (SDT),<sup>10</sup> a theory whose focus is on people's need to be a part of the adaptive planning of the human organization, to engage in interesting activities, realize their abilities, maintain relationships in social groups, and combine interpersonal experiences and interpersonal interactions. Self-determination theory (SDT) provides a theoretical framework for understanding the motivation to act, and in the current context, to adapt to a noncombat military position.

According to the SDT perspective, people's motivation to act-and thus their capacity to adapt to different situationsis influenced by three innate psychological needs:<sup>11</sup> (1) the need for autonomy or a sense of freedom of choice and control over decision-making; (2) the need for a sense of competence or the ability to feel capable of attaining desired or expected goals; and (3) the need for a sense of relatedness, namely, a desire to feel connected to others, to love and care, and to be loved and cared for. The variables that we selected in this study as predictors of adaptation represent three aspects through which the three basic needs of soldiers' adjustment are fulfilled. "Job meaningfulness" refers to selfdefinition as reflected by a soldier's mental well-being and sense of autonomy and the match between expectations and the military position itself. "Cognitive flexibility" represents the personal resources that soldiers bring to their military service. "Social support" is represented in this study by parents' attitudes toward military service in general, soldiers' peer support (i.e., two informal resources), and consultation with a mental health officer (MHO) (i.e., a formal resource provided by the military).

#### Job meaningfulness

Autonomy is a significant part of soldiers' sense of identifying with their role. In our study, we chose a particular characteristic of identifying with one's role: a sense of meaningfulness in this role. The definition of sense of meaningfulness refers to the meaning of actions that include a sense of purpose, direction, and direction toward the desired goal.<sup>12</sup> Meaningfulness also refers to a set of goals and emotions that make up people's core schemas or form the way individuals experience the world and themselves.<sup>12</sup> Finding meaning is broadly considered essential for adaptation to stressful situations, such as military service.

Earlier studies among military populations revealed that sense of meaningfulness in their job helped female soldiers following stressful situations in the army (such as physical injury that occurred during their service) to adapt better.<sup>13</sup> A study in the U.S. Military found that personality hardiness was associated with meaningfulness during deployment, which, in turn, was significantly associated with benefiting from the deployment after completion of military service.<sup>14</sup> Finally, among Swedish soldiers, for whom military service over the last decade has become non-compulsory, meaningfulness from their work was found to increase their job satisfaction.<sup>15</sup> The findings of the study illustrate the SDT conceptualization of one's need for autonomy.<sup>11</sup>

Meaningfulness in the military role has also been researched specifically among soldiers in noncombat positions, and various studies have indicated the existence of class differences in the military that parallel those in Israeli society.<sup>7</sup> Recruits from lower socioeconomic backgrounds are often drafted into menial military positions that reinforce their already marginalized social standing, provide fewer educational and advancement opportunities, and are not useful for future careers in the civilian world.<sup>7</sup> Moreover, service in the IDF is still viewed as a platform for social networking.<sup>3</sup> For many male soldiers (and their parents), military positions (e.g., elite, intelligence, and combat units) are considered stepping stones to good workplace opportunities in the future. Additionally, the government encourages combat service and rewards individuals for this type of service. Therefore, given that service in the IDF is compulsory and that service in combat units is mostly for male recruits, it is important to know whether both male and female soldiers feel meaningfulness in their service and whether the positions they were assigned contribute to their adjustment.

#### Cognitive flexibility

Cognitive flexibility is defined as the ability to change thoughts and behaviors to adapt to environmental changes, and it is therefore strongly related to adaptability.<sup>16</sup> When the environment changes, cognitively flexible individuals recognize this change and, after assessing the new situation, they can adjust their strategies under the new conditions—that is, they can adapt.<sup>16</sup>

Regarding airborne military members, cognitive flexibility was found to be one of the main predictors of adaptability.<sup>17</sup> Indeed, cognitive flexibility training focuses on helping individuals learn how to detect changes in unexpected environments or situations. In the words of Fletcher and Wind, "How, then, do we prepare people, teams, and organizational units for the unexpected, which by definition is something we cannot anticipate?" (p. 26).<sup>18</sup>

#### Social support

Social support is often described in the literature as one of the most important resources for a person contending with stress and stressful life events<sup>19</sup> and as a resource that contributes significantly to one's well-being. Researchers have found that social support contributes significantly to adjusting to new environments, for example among students in their first year of studies.<sup>20</sup>

The importance of social support is even greater in the context of military service. Several studies conducted among U.S. soldiers found that social support was associated with

mental health and a reduced risk of developing depression and posttraumatic stress disorder (PTSD),<sup>21</sup> especially among female soldiers.<sup>22</sup> Moreover, as studies in Israel have identified an association between parents' perspectives regarding the recruitment of their children for military service and soldiers' adjustment difficulties,<sup>23</sup> in this study we examined both peer support and parents' attitudes toward military service.

A study examining the relation between participation in military action in the U.S. Military and suicide found social support to be a mediating variable: Those who had social support before taking part in military action were less likely to have suicidal thoughts than those who did not have such support, and they also developed less PTSD.<sup>24</sup> Another study found that satisfaction from parental social support mediated the relation between attachment representations and adaptation to military service: Attachment representations that led to satisfaction with parental social support predicted better adaptation to military service.<sup>23</sup>

Regarding social support, the third independent variable in this study, this variable can be reflected by the need for a sense of relatedness.<sup>10</sup>

In this study, we measured informal social support via two factors that can make soldiers feel loved and cared for: (1) support from peers and (2) parents' attitudes toward military service in general. We measured formal support via (3) the seeking of help by soldiers from an MHO.

#### Seeking professional help

Help-seeking is essential in stressful circumstances, especially in the military environment. Lacking the ability to seek help is a risk factor for deterioration and crisis.<sup>25</sup> In a previous research, researchers have explored reasons for seeking or being hesitant to seek professional help. These reasons include, among other negative or positive attitudes toward mental health help-seeking,<sup>26</sup> having previously poor or broad help-seeking experiences,<sup>27</sup> preferring to handle one's problems on one's own, and stigma.<sup>25,28</sup> Stigma as a reason for soldiers not seeking mental health professional help is not a new concept among military members.<sup>29</sup>

#### The Present Study

As previously stated, IDF service is compulsory, with eligible soldiers being legally obligated to serve. The positions in which they serve, however, depend on a number of factors. After screening their physical and mental health, the army decides what position to assign the soldier, a decision that sometimes comes into conflict with the wishes and will of the soldier.

The objective of this study was to examine the unique and combined contribution of the three independent variables that constitute an individual soldier's personal resources—(1) the meaningfulness of the military role and the match between expectations and the job itself; (2) cognitive flexibility; and (3) social support as measured by (informal) support from peers, as well as parents' attitudes, and (formally) seeking help from an MHO—to the adaptation (dependent variable) of noncombat soldiers to military service. We assumed that (Hypothesis 1) meaningfulness of the military role, cognitive flexibility, and social support would contribute positively to adaptation to military service.

To examine the differences between those who sought help from an MHO and those who did not (as a dependent variable), we used all four variables as independent variables (meaningfulness, cognitive flexibility, social support, and soldier's adaptation). We assumed that (Hypothesis 2) differences would be found in the resources of soldiers who sought help from an MHO: Soldiers who consulted an MHO would have a lower level of sense of meaningfulness from their military role, cognitive flexibility, and social support compared to those who did not seek help from an MHO.

#### METHOD

#### Participants

The study population consisted of 200 IDF soldiers (56.3% female; n = 112), aged 18-23 years ( $\mu = 20$  years, SD = 0.951), who had completed an average of 14.11 months of service (SD = 8.68). The majority of soldiers, 74% (n = 148), had been assigned "blue-collar" positions (e.g., office workers or drivers, cooks, and administrative positions) compared to 25% (n = 50) who had been assigned "white-collar" positions (e.g., intelligence, computer programming, and cyber). About a third of the soldiers, 28% (n = 56), had been assigned to noncombat positions for medical reasons, 20.5% (n = 41) had been assigned to noncombat positions because they did not want to be combatants, 18.5% (n = 37) had been assigned to noncombat positions for other reasons, and 11.5% (n = 23) did not choose the position they had been assigned. The rest (41 soldiers) reported "other" reasons but did not elaborate specifically on why they had been assigned to a noncombat position.

#### **Design and settings**

The data for this cross-sectional study were collected at three open noncombat military bases. An examination for fitness for combat or support units (i.e., noncombat) had first been conducted at the recruitment center. Fitness is expressed by a medical profile (physical and mental). The Medical Corps has criteria by which to determine whether recruits are suitable for combat positions or support units<sup>30</sup> and, as such, the researchers made contact with noncombat soldiers at the three abovementioned open military bases (i.e., these soldiers go home every day) in central places on the base (e.g., cafeteria, medical clinic, and rest areas). Soldiers who agreed to participate in the study signed an informed consent form and completed the questionnaire in 20 minutes totally.

#### Measures

#### Sociodemographic and military variables

*Demographic variables.* Sex or gender, age, length of service, country of birth (Israel/other), parents' marital status (married/unmarried), religious status (secular/religious/traditional), education level, and economic situation (good/average/difficult).

*Military variables.* Expectations of military service (compatible/not compatible with actual position); sought help from MHO during service (yes/no).

*Position in the military.* The military role was coded into two categories: "white collar" and "blue collar." Each of the categories was coded into operational jobs vs. nonoperational jobs (i.e., if the job is related to operational activity).

#### The independent variables

Work and Meaning Inventory (WAMI). This questionnaire assesses the meaning derived from work via 10 items regarding three aspects: positive meaning, meaning-making through work, and developing purpose.<sup>31</sup> In this study, we adjusted the questionnaire to work in the military. In the first factor, the psychological significance of the military role was assessed (e.g., "I have a good sense of what makes my military role meaningful"). In the second factor, meaning-making in the military role was assessed (e.g., "I have discovered a role that has a satisfying purpose"). In the third factor, attributions of greater meaning to the military role were assessed (e.g., "There is a greater purpose to my role in the military"). Each item is rated by using a 5-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). A general score for the WAMI was calculated. Earlier uses revealed a total Cronbach's  $\alpha$  of .93.<sup>31</sup> For this study, Cronbach's  $\alpha$  for the whole scale was .90.

The Cognitive Flexibility Scale (CFS). This scale was used to measure cognitive flexibility.<sup>32</sup> The CFS measure consists of 12 items regarding three components of cognitive flexibility: awareness of options (e.g., "I have many possible ways of behaving in any given situation"), willingness to be flexible in new situations (e.g., "I am willing to work at creative solutions to problems"), and self-efficacy in being flexible (e.g., "I can communicate an idea in many different ways"). Each item is rated on a 6-point Likert scale ranging from 1 ("strongly disagree") to 6 ("strongly agree"). Total scores on the CFS range from 0 to 72, where 72 signifies superior cognitive flexibility.<sup>33</sup> The internal consistency of this scale was originally found to have a Cronbach's  $\alpha$  of .82.<sup>32</sup> For this study, the Cronbach's  $\alpha$  was .82.

The Medical Outcomes Study (MOS).<sup>34</sup> This scale consists of 19 items referring to five support types. In this study, we used the MOS to examine acceptance from soldiers' peers: that is, instrumental social support (e.g., "can lend you money if you need it"); emotional support (e.g., "will listen to you when you feel the need to speak"); expresses affection (e.g., "hugs you"); provides information (e.g., "can give you good advice in times of crisis"); and offers positive social companionship (e.g., "you can do something fun with them"). Each item is rated on a 5-point Likert scale ranging from 1 ("never") to 5 ("always"). Due to high correlations between the subscales, we used only the total scale. The higher the score on the scale, the higher the social support. Internal-consistency reliability was originally found to be  $\alpha = .95.^{34}$  For this study, the total Cronbach's  $\alpha$  was .97.

In addition, a "question regarding 'parents' attitudes" toward military service in general was asked. Possible answers ranged from "encouraged recruitment" to "had no position" to "against recruitment."

#### The dependent variable

The Soldier Adaptation to the Army Questionnaire (SAAQ).<sup>35</sup> The SAAQ in its short version in Hebrew includes 20 items and three subscales: connection to the military framework (e.g., "Here and there I had personal and social connections with commanders in the military"); a sense of social comfort (e.g., "Since enlisting I have met people and made friend-ships to the extent I want"); and motivation and performance (e.g., "I look forward to staying in the army until the end of my service"). Each item was rated on a 7-point Likert scale ranging from 1 ("describes me very well") to 7 ("does not describe me at all"). A total score was calculated as the mean response to all items. In a reliability test, the Cronbach's  $\alpha$  for the total score was .82. Cronbach's  $\alpha$  for total SAAQ in this study was .917.

#### Statistical analysis

The Statistical Package for the Social Sciences (SPSS, version 24.0 for Windows) was used for all analyses. To examine the differences between those who sought help from an MHO and those who did not (as a dependent variable), we used all four variables as independent variables (WAMI, CFS, MOS, and the SAAQ). Additionally, the demographic variables of those who sought help from an MHO and those who did not were compared. Correlations between the variables were tested using the Pearson test for symmetric variables distributed and the Spearman test for asymmetric variables distributed. Regressions were made in two steps. For the mediation model, we used Hayes' PROCESS procedure (3.3 version).

To examine the unique contribution of the three independent variables (WAMI, CFS, and MOS) to soldier's adaptation (SAAQ as the dependent variable), we used multivariate analyses to predict adaptation to the military by the study variables.

A test was conducted to examine the need for and possibility of completing missing values. Seven missing values were found for all regression variables. An examination that we conducted revealed that the missing values were coincidental. It was, therefore, decided that missing variables could be completed. We performed one completion (Stocksmith regression).

						Sought MHO help							
						Yes		No					
	Mean	SD	Median	Minimum	Maximum	М	SD	М	SD	Т	df	Р	d
Role meaning	3.22	0.95	3.40	1.20	4.90	3.06	0.96	3.40	0.91	2.56	198	.011	0.36
Cognitive flexibility	4.41	0.71	4.41	2.75	5.92	4.26	0.76	4.58	0.63	3.32	197.65	.001	0.47
Adaptation	4.47	1.27	4.53	1.28	7.00	4.10	1.32	4.90	1.07	4.76	197.16	<.000	0.68
						Sought MHO help							
						Yes		No					
						М	SD	М	SD	U	Ζ	Р	r
Social support <sup>a</sup>	4.10	0.80	4.21	1.63	5.00	3.99	0.91	4.24	0.64	4374.00	-1.74	.14	0.1

**TABLE I.** The Research Variables in the Division of Seeking MHO Help: Mean and SD (N = 200)

Chi-square tests (symmetric distribution): P < .05; *t* test (Student's *t*-distribution);

<sup>a</sup>Mann–Whitney test (nonparametric test).

**TABLE II.** Pearson Correlation for Parametric Distribution and Spearman Correlation for Nonparametric Distribution

	Gender	Months of service (range 2–56)	Sought MHO help	Socioe- conomic status	Parents' atti- tude toward military service	Military job	Matched expectations from military service	CFS <sup>2</sup>	SAAQ <sup>3</sup>	MOS <sup>4</sup>
WAMI <sup>a</sup> CFS <sup>b</sup> SAAQ <sup>c</sup> MOS <sup>d</sup>	-0.071 0.141 <sup>*</sup> -0.018 -0.067	0.019 0.107 0.138 0.170*	-0.179* -0.227** -0.316*** -0.155*	0.097 0.191 <sup>**</sup> 0.127 0.208 <sup>**</sup>	0.192** 0.213** 0.305*** 0.223**	0.329*** 0.115 0.245** 0.142*	0.587*** 0.047 0.490*** 0.156*	0.177*	0.647 <sup>****</sup> 0.461 <sup>****</sup>	0.178 <sup>*</sup> 0.450 <sup>****</sup> 0.410 <sup>****</sup>

<sup>a</sup>Work as meaning—WAMI;

<sup>b</sup>The Cognitive Flexibility Scale—CFS;

<sup>c</sup>The Soldier Adaptation to the Army Questionnaire—SAAQ;

<sup>d</sup>A social support questionnaire—the Medical Outcomes Study—MOS.

\*P < .05.

\*\**P* < .01.

\*\*\**P*<0.001.

# Ethical approval

The study was approved by the IDF Human Research Review Board (No. 1991-2019).

# RESULTS

# Difference in the research variables in seeking MHO help

The study found that soldiers who had consulted an MHO had lower levels of cognitive flexibility and adaptation to service compared to those who did not apply for help (Table I).

Differences in seeking MHO help according to demographic variables and military variables using chi-square tests were examined (data are not presented in the table). The chi-square tests revealed that "expectations of military service" was the only variable that was found to be significant (P = .027) among soldiers who reported that their military role aligned with their expectations. Only 27% sought out an MHO, in comparison to 42% among those whose role did not align with their expectations.

# Correlations between the study variables

For correlations between the study variables, we used the Pearson correlation for parametric distribution and the Spearman correlation for nonparametric distribution.

As can be seen in Table II, there were high and positive correlations between the independent variables in military role meaningfulness, r(200) = 0.65,  $r^2 = 0.42$ , P < .001, cognitive flexibility, r(200) = 0.46,  $r^2 = 0.21$ , P < .001, and social support, r(200) = .41,  $r^2 = 0.17$ , P < .001, with adaptation to service. The item "expectations of service" was positively associated with role meaningfulness and with adaptation. The item "parents' attitudes" was positively associated with all three independent variables and with adaptation to the military.

# Multivariate analysis

For predicting adaptation to the military, we conducted a regression analysis. Predictor variables were entered into the model in two blocks. The first block consisted of sociodemographic and military variables (e.g., gender, months of

	Step	В	SD	В	t	$R^2$	$\Delta R^2$
	1						
Gender		-0.009	0.15	003	-0.06		
Months of service		0.02	0.009	.13	2.17*		
Sought MHO help		-0.57	0.15	22	-3.76***		
Socioeco- nomic status		0.07	0.15	.03	0.45		
Parents' attitude toward military service		0.58	0.20	.17	2.89**		
Military job		0.31	0.17	.11	1.82		
Matched expecta- tions from military service		1.06	0.16	.40	6.73****	0.37	0.37***
	2						
WAMI <sup>a</sup>		0.6	0.08	.46	7.8***		
CFS <sup>b</sup>		0.43	0.09	.25	4.65		
MOS <sup>c</sup>		0.29	0.08	.19	3.5**	0.26	0.63***
Summary		F(10,18	(7) = 31.7	6, P < .00	1		

**TABLE III.** Multivariate Analyses: Prediction of Adaptation to the<br/>Military by the Study Variables (N = 200)

Note. \*P < .05.

\*\*P < .01.

\*\*\*P < .001.

<sup>a</sup>Work as meaning questionnaire—WAMI.

<sup>b</sup>The Cognitive Flexibility Scale—CFS.

<sup>c</sup>A social support questionnaire—The Medical Outcomes Study—MOS.

service, sought MHO help, military position, expectations, and parents' attitudes). The second block consisted of the independent variables of the model (role meaningfulness, cognitive flexibility, and social support). The regression model is presented in Table III.

The total set of variables explained 63% of the variance. Table III shows that in the first block, the variables explained 37% of the variance of adaptation to the military. Shorter length of service and requesting MHO help were associated with lower adjustment. A better match between soldier expectations and actual position and positive parents' attitudes was associated with better adaptation. The second block added 26% to the variance. As was found in the correlations, higher cognitive flexibility, greater role meaningfulness, and more social support were associated with better adjustment.

When looking at the role of social support as a mediating factor in the relation between cognitive flexibility and adaptation to service, it was revealed that social support partially mediated the relation between cognitive flexibility and adaptation to service (Fig. 1). Figure 1 shows that a partial indirect effect of cognitive flexibility was found on adaptation to military service through social support (ind = 0.17, CI = 0.063). The higher the cognitive flexibility, the higher the level of social support (B = 0.45, P < .001), and the higher the social support, the better the adaptation to service (B = 0.37, P < .001). In addition, there was a direct effect between cognitive flexibility and adaptation to military service (B = 0.46, P < 0.001). The total effect of cognitive flexibility on adaptation to military service was B = 0.63, P < .001.

#### DISCUSSION

The purpose of this study—that which makes it innovative was to investigate the contribution of the following factors meaningfulness of the military role and the match between expectations and the position itself; cognitive flexibility; and social support as measured by (informal) support from peers, as well as parents' attitudes, and (formally) seeking help from an MHO—to the adaptation of noncombat soldiers to military service. As presented in the Introduction, the effects of military enlistment on the adjustment of combat soldiers have been investigated in numerous studies.<sup>5,6</sup> The effects of military enlistment on soldiers in noncombat positions have, however, been much less explored.

Bearing out our first hypothesis, differences were found in the resources of soldiers who sought help from an MHO. We found that the level of resources among soldiers who sought help from an MHO was lower than among soldiers who did

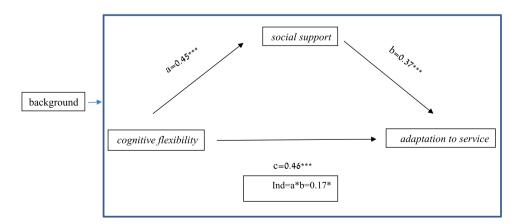


FIGURE 1. The mediation model. The association between cognitive flexibility and adaptation to service, mediated by social support.

not seek help. For example, the conscripts who sought mental health services were more likely to have lower levels of cognitive flexibility and adaptation to their role. Even taking into account the sex distribution, no differences were found between male and female soldiers or between operational jobs vs. nonoperational jobs in the variable "sought help from an MHO." The lack of differences in these variables reduces the chance that other variables not included in this study would have contributed to avoiding seeking help, such as stigma. As is known, the factors that make one less likely to seek help are being male and being in a combat unit<sup>36</sup> (compared to being female<sup>37</sup> and being in a noncombat unit). The variable of "expectations of military service" was the only variable that was found to be significant.

In addition, soldiers who sought help from an MHO felt that their role did not align well with their expectations and thus their adjustment was also lower. These findings are in line with earlier findings showing that soldiers who seek help indeed have higher levels of distress.<sup>38</sup>

All of the model's variables in our study were found to contribute to soldiers' adjustment. Regarding meaningfulness of the military role, a positive association was found between role meaningfulness and service adaptation. As expected, in line with the theory of work adjustment<sup>39</sup> in a military setting, soldiers (both combat and noncombat) who were dissatisfied with their jobs and failed to make changes that might increase their satisfaction experienced adjustment difficulties.<sup>5,6</sup> Moreover, a good match between expectations and the position itself was found to be associated both with meaningfulness and with better adjustment.

A positive association was found as well between cognitive flexibility and adaptation to service, a finding that is consistent with findings from several studies. For instance, it was found among American soldiers that cognitive flexibility was one of the personality traits that characterized soldiers whose behavior was adaptive and who had high self-efficacy.<sup>40</sup> Further support for such ideas can be found in SDT,<sup>10</sup> according to which one of the basic needs that motivates a person to act is self-efficacy.

In terms of social support, this study's findings are consistent with research among male and female soldiers,<sup>41</sup> indicating that social support contributes to mental health and adjustment in general.<sup>22</sup>

In this study, parents' positive attitudes were associated with soldiers' better adjustment. In a study conducted among the Korean army, it was revealed that overprotective parents' attitudes were associated with impairments in soldiers' adaptation to the military.<sup>42</sup>

Finally, a partial indirect effect of cognitive flexibility on adaptation to military service through social support was found: Namely, the higher the cognitive flexibility, the higher the level of social support, and the higher the social support, the better the adaptation to service. This finding can perhaps be attributed to the idea that cognitive flexibility is related to higher levels of communication competence and higher levels of social skills.<sup>22</sup> Cognitive flexibility seems to express a nuanced ability to reassess what it takes to achieve a desired social resource, thus enabling better adaptation.

The research's innovativeness lies in its broadening and deepening of the understanding of how "blue-collar" positions may contribute to problems among noncombatants in adapting to military service. In order to help these soldiers better adapt to their service, to retain them, and to help them reach their full potential in these roles, the three SDT needs must be addressed.

The importance of cognitive flexibility and social connectedness in enabling people to find meaning in their role is highlighted in this study. Such findings are likely very similar for any young adult entering a new work environment, military or otherwise. More importantly, they provide insight and direction on systemic actions that could be implemented to facilitate and improve both skills. Hence, additional research would help in terms of making recommendations to military leadership.

The study's findings indicate the importance of soldiers perceiving their roles as meaningful, of soldiers' social support networks, and of soldiers' cognitive flexibility. These factors were found to contribute significantly to soldiers' success in adapting to military service. Soldiers' perceptions of the meaningfulness of their military role made the highest contribution among the independent variables, with soldiers who perceived their military role as meaningful adapting better to military service.

The study's limitations should be taken into account. First, the data in this study were based on subjective reporting by the soldiers; as such, the data may be biased and incomplete, as acknowledging personal difficulties is never straightforward and perhaps even less so among this age group. Second, the data came from a convenience sample (although they did come from three different military bases). Third, those who seek help differ from those who do not seek help in multiple dimensions that were not included in the analysis. Furthermore, causation should not be inferred from data collected at a single time point. In addition, in this study we did not investigate the possibility of support offered (or not) by commanding officers, a factor which could play a significant role in a soldier's ability to adapt to the military environment. Likewise, there was no information regarding soldiers who dropped out of military service, perhaps due to their inability to adapt to the new environment. A further study taking these missing factors into account is, therefore, warranted.

Notwithstanding these limitations, the study makes several empirical and clinical contributions. Ongoing attention must be paid to soldiers in noncombat positions. In Israel, where military service is compulsory, soldiers in "blue-collar" positions may have less opportunity for advancement in the future. Therefore, they need ongoing attention.

Another population that needs ongoing attention is soldiers who seek help from an MHO. These soldiers indeed report lower resources and feel lower adjustment. The contribution of personal and environmental resources to military service adaptation reflects soldiers' experiences in their military roles and highlights the distress of soldiers with weaker social resources. The military infrastructure's acknowledgment of the impact of these factors may lead to better preparation of soldiers for their intended roles and may constitute yet another layer in the establishment of effective and successful preparation programs for military service.

Finally, a significant contribution of this study is its revelation of how adaptation theories related to work environments can also be used in regard to the adaptation of soldiers to military service, specifically with soldiers in noncombat positions.

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None of the authors reports any financial or other conflict of interest with regard to the current study.

#### REFERENCES

- 1. Gilbreath B, Kim T, Nichols B: Person-environment fit and its effects on university students: A response surface methodology study. Res High Educ 2011; 52(1): 47–62. 10.1007/s11162-010-9182-3.
- Bohndick C, Rosman T, Kohlmeyer S, Buhl HM: The interplay between subjective abilities and subjective demands and its relationship with academic success. An application of the person – environment fit theory. Higher Educ 2018; 75(5): 839–54. 10.1007/s10734-017-0173-6.
- Girsh Y: Negotiating the uniform: youth attitudes towards military service in Israel. Young 2019; 27(3): 304–20. 10.1177/ 1103308818787647.
- Shelef L, Tomer G, Tatsa-laur L, Kedem R, Bonne O, Fruchter E: Risk factors for suicide in the Israeli army between the years 1992–2012: a case-control study. Eur Psychiatry 2017; 39: 106–13. 10.1016/j. eurpsy.2016.08.005.
- Huss E, Cwikel J: Women's stress in compulsory army service in Israel: a gendered perspective. Work 2015; 50(1): 37–48. 10.3233/WOR-141930.
- Yu Y, Peng L, Liu B, et al: The effects of anxiety and depression on stress-related growth among Chinese army recruits: Resilience and coping as mediators. J Health Psychol 2016; 21(9): 1884–95. 10.1177/1359105314567769.
- Levy G, Sasson-Levy O: Militarized socialization, military service, and class reproduction: The experiences of Israeli soldiers. Sociol Perspect 2008; 51(2): 349–74. 10.1525/sop.2008.51.2.349.
- Chappelle W, Goodman T, Reardon L, Thompson W: An analysis of post-traumatic stress symptoms in United States Air Force drone operators. J Anxiety Disord 2014; 28(5): 480–7. 10.1016/j.janxdis.2014. 05.003.
- Shelef L, Nir I, Tatsa-Laur L, et al: The effect of the suicide prevention program (SPP) on the characteristics of Israeli soldiers who died by suicide after its application. Eur J Psychiatry 2019; 62: 74–81. 10.1016/j.eurpsy.2019.08.007.

- Deci EL, Ryan RM: The "What" and "Why" of goal Pursuits: Human needs and the self-determination of behavior. Psychol Inq 2000; 11(4): 227–68. 10.1207/S15327965PLI1104.
- 11. White RW: Motivation reconsidered: The concept of competence. Psychol Rev 1959; 66(5): 297–333. 10.1037/h0040934.
- Roepke AM, Jayawickreme E, Riffle OM: Meaning and health: A systematic review. Appl Res Qual Life 2014; 9(4): 1055–79. 10.1007/ s11482-013-9288-9.
- 13. Cater JK: A phenomenological study of female military servicemembers' adjustment to traumatic amputation. University of Arkansas, ProQuest Dissertations and Theses. ProQuest LLC; 2010.
- Britt TW, Adler AB, Bartone PT: Deriving benefits from stressful events: the role of engagement in meaningful work and hardiness. J Occup Health Psychol 2001; 6(1): 53–63. 10.1037/1076-8998.6.1.53.
- Österberg J, Rydstedt L: Job satisfaction among Swedish soldiers: applying the job characteristics model to newly recruited military personnel. Mil Psychol 2018; 30(4): 302–10. 10.1080/08995605.2018. 1425585.
- Miconi D, Moscardino U, Altoè G, Salcuni S: Self-construals and social adjustment in immigrant and nonimmigrant early adolescents: The moderating role of executive functioning. Child Dev 2019; 90(1): 37–55. 10.1111/cdev.12918.
- 17. Belin AV, Berendeev MP, Mikerin AA, Kotov PF, Kostikova LP, Belogurov AY: Adaptability issues in professional training of the military. Vol. 416 of In Proceedings of the 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020). Advances in Social Science, Education and Humanities Research, 660–663, 2020.
- Fletcher JD, Wind AP: The evolving definition of cognitive readiness for military operations. In: *Teaching and Measuring Cognitive Readiness*, pp. 25–52. Edited by O'Neil HF, Perez RS, Baker EL, Springer, 2013.
- Dewall CN, Baumeister RF: Alone but feeling no pain: effects of social exclusion on physical pain tolerance and pain threshold, affective forecasting, and interpersonal empathy. J Pers Soc Psychol 2006; 91(1): 1–15. 10.1037/0022-3514.91.1.1.
- Lau EYH, Chan KKS, Lam CB, Support S: Adjustment outcomes of first-year university students in Hong Kong: self-esteem as a mediator. J Coll Stud Dev 2018; 59(1): 129–34. 10.1353/csd.2018.0011.
- Russell DW, Benedek DM, Naifeh JA, et al: Social support and mental health outcomes among US Army Special Operations personnel. Military Psychology 2016; 28(6): 361–75. 10.1037/mil0000114.
- 22. Lehavot K, Der-Martirosian C, Simpson TL, Shipherd JC, Washington DL: The role of military social support in understanding the relationship between PTSD, physical health, and healthcare utilization in women veterans. J Trauma Stress 2013; 26(6): 772–5. 10.1002/jts.
- Scharf M, Mayseless O, Kivenson-Baron I: Leaving the parental nest: adjustment problems, attachment representations, and social support during the transition from high school to military service. J Clin Child Adolesc Psychol 2011; 403: 411–23. 10.1080/15374416.2011.563464.
- 24. Griffith J: Suicide and war: the mediating effects of negative mood, posttraumatic stress disorder symptoms, and social support among Army National Guard soldiers. Suicide Life-Threat Behav 2012; 42(4): 453–69. 10.1111/j.1943-278X.2012.00104.x.
- Henderson C, Evans-Lacko S, Thornicroft G: Mental illness stigma, help seeking, and public health programs. Am J Public Health 2013; 103(5): 777–80. 10.2105/AJPH.2012.301056.
- Seyfi F, Poudel KC, Yasuoka J, Otsuka K, Jimba M: Intention to seek professional psychological help among college students in Turkey: influence of help-seeking attitudes. BMC Res Notes 2013; 6(1): 1–9. 10.1186/1756-0500-6-519.
- 27. Clark LH, Hudson JL, Dunstan DA, Clark GI: Barriers and facilitating factors to help-seeking for symptoms of clinical anxiety in

adolescent males. Aust J Psychol 2018; 70(3): 225–34. 10.1111/ajpy. 12191.

- Gulliver A, Griffiths KM, Christensen H: Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. BMC Psychiatry 2020; 10(1): 113. 10.1186/1471-244X-10-113.
- Bryan CJ, Jennings KW, Jobes DA, Bradley JC: Understanding and preventing military suicide. Arch Suicide Res 2012;16(2): 95–110. 10.1080/13811118.2012.667321.
- 30. Shelef L, Laur L, Raviv G, Fruchter E: A military suicide prevention program in the Israeli Defense Force: a review of an important military medical procedure. Disaster Mil Med 2015; 1(1): 1–5. 10.1186/s40696-015-0007-y.
- Steger MF, Dik BJ, Duffy RD: Measuring meaningful work: the work and meaning inventory (WAMI). J Career Assess 2012; 20(3): 322–37. 10.1177/1069072711436160.
- 32. Martin MM, Rubin RB: A new measure of cognitive flexibility. Psychol Rep 1995; 76(2): 623–6. 10.2466/pr0.1995.76.2.623.
- Martin MM, Anderson CM: The cognitive flexibility scale: three validity studies. Commun Rep 1998; 11(1): 1–9. 10.1080/ 0893421980936768051.
- Sherbourne CD, Stewart AL: The MOS social support survey. Soc Sci Med 1991; 32(6): 705–14. 10.1016/0277-9536(91) 90150-B.
- 35. Wintre MG, Ben-knaz R: It's not academic, you're in the army now: adjustment to the army as a comparative context for adjustment

to university. J Adolesc Res 2000; 15(1): 145–72. 10.1177/ 0743558400151008.

- Applegarth DM, Wood DS, Bryan AO, Bryan CJ: Examining helpseeking among National Guard service members. Mil Behav Health 2019; 7(2): 198–205. 10.1080/21635781.2018.1526143.
- 37. Duncan JM, Reed-Fitzke K, Ferraro AJ, Wojciak AS, Smith KM, Sánchez J: Identifying risk and resilience factors associated with the likelihood of seeking mental health care among US army soldiers-in-training. Mil Med 2020; 185(7–8): e1247–e1254. 10.1093/ milmed/usz483.
- Shelef L, Garber E, Yavnai N, Ben-Yehude A, Levi-Belz J: Suicide among Ethiopian origin soldiers in the IDF—a qualitative view of risk factors, triggers and life circumstances. J Affect Disord 2020; 269: 125–33. 10.1016/j.jad.2020.03.034.
- Dawis RV, Lofquist LH: A Psychological Theory of Work Adjustment: An Individual-differences Model and Its Applications. University of Minnesota Press, 1984.
- Griffin B, Hesketh B: Adaptable behaviours for successful work and career adjustment. Aust J Psychol 2003; 55(2): 65–73. 10.1080/ 00049530412331312914.
- Giacco D, Matanov A, Priebe S: Symptoms and subjective quality of life in post-traumatic stress disorder: a longitudinal study. PLoS One 2013; 8(4): e60991. 10.1371/journal.pone.0060991.
- Bark K, J H H, Jue J: Examining the relationships among parental overprotection, military life adjustment, social anxiety, and collective efficacy. Front Psychol 2021; 12: 1–9. 10.3389/fpsyg.2021.613543.