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From Difficulty to Opportunity: the Pre-Military Activity in the IDF

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Abstract

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The pre-military activity in Israel is an educational model, in the framework of which the individual is supported and empowered by the Israel Defense Force (IDF) as a result of the reduction of the number of learners in technological education and the significant lack in manpower for the different technological constellations in the IDF. The article will present the contribution of the pre-military activity held by the IDF, including its influence in different dimensions. In the framework of the article, initial data will be presented on the contribution of the pre-military activity and on the perceptions of the school principals, teachers, supporting military staff, and students who learn in the pre-military program. The article will also present the contribution of the pre-military activity in the high schools to the success of its graduates, while examining the influence of this activity on the motivation and success of its graduates in the continuation of post-secondary school technological studies.

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1. Introduction

Our present era is characterized by the intensiveness of powerful changes. The world is subject to constant changes and is characterized by scientific technological evolution. The development and extension of technology to different areas have not passed over the militaries of the world and have caused increasing reliance on complex technological means of warfare that emphasize the importance of the technical constellation (Behavioral Sciences Division: Research Department, 2014).

The technical system in the IDF is defined as one of the important and strategic systems. However, despite its importance, the IDF is coping with the steadily increasing challenges regarding manpower, with the emphasis on the decline in the recruitment numbers and in the motivation for this option (Tsadok, 2009; Yanko, 2013).

As a part of the activities that the IDF adopts to bridge over of these personnel gaps, different pre-military programs are implemented. The goals of these pre-military programs are to broaden the number of learners in technological education and to increase the students' motivation to be recruited to the service of the technological military (IDF Website, 2016).

2. Theoretical Background

The success of the State of Israel, which is perceived as a start-up power, is largely related to the products of its educational system and to its investment in research and development (Lotan, 2007). The defense industry¹, which constitutes a significant factor in the fortification of the strength of the State of Israel, works hard on the developments of the future, which may change the field of battle². However, it finds it difficult to staff thousands of positions in the manufacturing lines and in the plants with traditional vocation holders, such as machinists, electricians, chip fabrication workers, and so on (Work Ratings Website, 2016). These professions are not hi-tech, but nevertheless they are most significant to the activity and ongoing existence of the State of Israel, including its export ability.

In the State of Israel, as of the year 2015, there are 2.128 million students (in Jewish education and in Arab education, in the schools and in the kindergartens), of whom about 140,000 students study in vocational-technological education, in 860 schools nationwide, constituting 38% of the students (Ministry of Education Website, 2016). The number of learners in technological education today is significantly lower than the number of students who learn in this education in the 1970s, which was then 52% of the students³ (Vargen & Natan, 2008). In addition, the achievements of Israeli youth relative to their peers around the world are lower in comparison to the OECD⁴ mean in the comparative international tests (Weissblay, 2013).

The rapid changes in the fields of computerization and information technology that created far-reaching changes in different fields influenced greatly the characteristics of the fighting and the building of the strength of the different militaries (Baram, 2013). The State of Israel in the contexts of military and national security according to different research studies suffers from numerical inferiority both in the amount of the weapons and in the size of the military, in comparison to the militaries of the Arab countries (Yanko, 2013). The advanced technology use by the Israel Defense Force constitutes a significant power multiplier and almost completely reduces the advantage of its enemies and even positions it according to different research studies in the 14th place in the militaries of the world (Credit Suisse, 2015).

¹ See, for example, Elbit, Elta, Rafael, the Military Industry, and so on.

² See, for example, the Iron Dome System.

³ The Ministry of Education as a result and its desire to extend the number of learners formed a program for the increase of the number of the learners, to 50% in the year 2024 (The Marker, October 26, 2014).

⁴ Organisation for Economic Co-operation and Development

The technological empowerment does not reduce the amount of manpower required for continuous maintenance; the reverse is true. The development of technology increases the need for skilled technological manpower, when an example is the drone (UAV – Unmanned Aerial Vehicle), which will fly without a person but its operation requires more people on the ground.

The technological constellation in the IDF is one of the critical systems in strategic terms and in terms of size to the functioning of the IDF on the combat field (Tsadok, 2009). The staffing of this system is complex and very challenging. The system is characterized by low attractiveness in the eyes of the recruits, when the service in it is based on prior technological knowledge and the work includes physical labor (Behavioral Sciences Division: Research Department, 2014).

The number and quality of the learners in technological education in the State of Israel, which has dropped in recent decades, directly influence the ability of the IDF to fulfill its tasks routinely and in times of emergency, in light of the staffing gaps. The lack of technological personnel who have graduated from the educational system is significantly exacerbated in light of the number of youths who are not drafted into the IDF to share the burden, for different reasons, when the main one is the declaration of religion for men and women (Rotter, 2015).

This reality may worsen significantly in light of the increase of the size of the Ultra-Orthodox sector and the size of the minority population (Paltiel, Sepulchre, Kornilenko, & Maldonado, 2012) who are not drafted into the IDF as a result of different ideological processes.

The Compulsory Draft Law (Knesset website, 2016), which supposedly allows the IDF to choose the best for this system and to overcome the gap created by the low number of learners in technological education as a result of its importance, is not realized in the daily reality in light of the fact that the most talented and motivated youths choose to volunteer to the different combat units (Yanko, 2013).

The sharp increase in the need of the Israel Defense Force for human capital with technological orientation and knowledge and the number of graduates of technological education, which is low in comparison to the past, emphasize the scope of the challenge with which the IDF copes in the short-term and the civil industry and the State of Israel cope in the intermediate term (Lotan, 2007).

In past years, before the establishment of the State of Israel and in the following years, the choice to be educated in the youth villages in the boarding school framework, where the student would sleep and be fed, was a common and attractive choice. This choice was for the most part derived from Zionist and ideological components. The youth villages served as a leading social educational framework and filled a main role in the training of the future generation of citizens in the young country (Mash, 2001).

Over the years, changes occurred in the type of population that turns to be educated in the youth villages. Today few of the young people attend the youth villages for ideological reasons, and most of the population educated in the youth villages are youths for whom this framework is a 'last resort' (Mash, 2001). In addition to the social perception, changes occurred in the treatment-social perceptions that emphasize the community versus institutional approaches, which causes reluctance and reservations in the family and the environment about the individual's departure from his home to the boarding school framework (Mash, 2001).

In light of the changes that derive from the non-departure of youths to youth villages and boarding schools and as a result of the reduction of the number of learners in technological education and the need to have different platforms that meet the needs of the IDF and provide a response to the social changes that happened, the Israel Defense Forces created along with the different educational networks local models that enable the individual to enjoy the support and empowerment near his residence (Ort Israel website, 2016).

These platforms grew significantly and now constitute a source of quantitative and qualitative cultivation that bridges the personnel gaps and motivation for the different technological systems. This activity is held in dozens of different schools, for thousands of students around the country, in diverse models and at different intensities (Yanko, 2013; Tsadok, 2009). In the framework of the activity, the students are exposed to activity of empowerment both on the personal level and on the group level, as a part of the gradual process, at the end of which these students will be drafted into the Israel Defense Force when they are more educated and have a stronger motivation to serve.

One of the programs that the IDF operates is the Shoharut program, in the framework of which students are supported from the ninth grade to the twelfth grade. In the framework of this support program, the students are in uniform, in a technological study program, and are strengthened through trips, structured lessons, reinforcement days, formation days, reinforcement sessions, support military staff, mentoring officers, and so on (Ministry of Education Website, 2016).

This program, like other pre-military programs, emphasizes the development of the individual's sense of self-efficacy as a lever to the maximization of his abilities in the military service and later⁵, as deriving from the understanding that to succeed in the complexity of daily life, including in the military service, the person needs to correctly evaluate his abilities, including his ability to assess the influence of different events and his ability to use the opportunities that come to him.

This assessment constantly influences the individuals' behavior at any given moment. The individual's judgment of his abilities to perform actions so as to achieve the goals that he seeks is his self-efficacy (Bandura, 1977).

A person with a high self-efficacy is characterized by great perseverance in the goals that he set for himself. A person with a low self-efficacy will invest in the task when he understands that it is commensurate with his abilities, but when he perceives the task as impossible then he will stop putting forth effort.

Self-efficacy is built and influenced by a number of sources related to the personal experiences and the influence of the environment on the individual. There are four sources of information that influence the individual's sense of self-efficacy (Bandura, 1997): (1) experience and achievements, (2) indirect experience through others, (3) verbal persuasion, and (4) physiological and emotional arousal.

The pre-military activity acts in these dimensions and others, so as to empower the individual and to allow his coping with the challenges he faces. It is possible to conclude, therefore, that young people who will feel ready for the challenges that independent life places before them in different and diverse areas will succeed in coping better with them, in light of their confidence and belief in their ability, including their ability to cope with their military service and with the challenges they face in it.

⁵ See, for example, different pre-military programs such as "After Me" and others.

3. Methodology

The pre-military activity is a rich and complicated process in different areas that constitute a whole content world that enables investigation and extension. As a result of the need to limit the scope of discussion, this article will address the perception and contribution of the pre-military activity, as it is reflected in the eyes of the principals, teachers, officers, and students and in the presentation of the initial findings on this topic. Consequently, the qualitative research approach was chosen as the method of analysis in the framework of which content analysis is performed to extract the main categories/themes.

4. Research Question

What are the perceptions of the school principals, the teachers, the officers, and the students regarding the contribution of the pre-military program?

5. Research Hypothesis

The pre-military activity has an influence on the motivation for the continuation of the studies, on the self-discipline, on the sense of self-efficacy, and on the motivation for the military service.

6. Research Population

The research population included teachers, school principals, military support staff (class commanders, support officers), and students who learn in the pre-military program. In the framework of the research, 21 in-depth interviews were conducted that enable a broad look at all the factors involved in the pre-military program. The interviewees were:

- Nine students in grades ten, eleven, and twelve.
- Six teachers/school principals.
- Six military staff (supporting officers, class commanders)

7. Findings

Categorization constitutes a means for finding meaning. In the framework of the process of the analysis, passages of data that appear to belong to the same phenomenon were combined, so as to obtain the meaning of the data (Shkedi, 2003).

The data presented in table number 1 constitute a representative sample of the perceptions of the different factors of the contribution of the pre-military activity. Table number 2 presents the number of references to every category as they arose in the stages of the analysis.

Table 1. Division into Categories according to the Stages of the Analysis

Theme	The Pre-Military Activity – Empowering Dimensions
	<p data-bbox="403 360 730 389">Delineation of a future horizon:</p> <ul data-bbox="453 427 1359 929" style="list-style-type: none"> <li data-bbox="453 427 715 456">• "I learn for the future" <li data-bbox="453 490 1262 519">• "I joined the program since I wanted to achieve something before the military" <li data-bbox="453 553 1353 613">• "They showed me at an early age why it is important to study and why it is important to succeed and why I should continue" <li data-bbox="453 647 1359 770">• "They would take us on tours of bases and would really show us, they showed us what we will do in the military, depending on what we will learn. We learned only electronics and if we continue to engineering technician and engineer what we can do in the military" <li data-bbox="453 804 1345 929">• "The very fact that the program delineates a picture of the future for the student who says come, connect to us, and at the end of the path you will be an engineering technician. And an engineering technician is an intermediate diploma that gives you an industrial horizon, this is rather successful." <p data-bbox="403 965 1337 1059">The uniqueness of the uniforms, the uniqueness of the program that begins in essence from the eighth grade, from our perspective includes the topic of the military and academia, the child and the parents see a horizon"</p>
Categories	<p data-bbox="403 1126 515 1155">Discipline:</p> <ul data-bbox="453 1193 1359 2018" style="list-style-type: none"> <li data-bbox="453 1193 963 1223">• "The drills greatly help to introduce discipline". <li data-bbox="453 1256 1359 1350">• "The program contributes to me in self-discipline, order, time management. I would still be a little late to the lesson but over time you learn to overcome and to see your discipline, the commanders, the teachers". <li data-bbox="453 1384 1289 1444">• "The program in the personal dimension contributed to my discipline, to order, to meeting time demands, to the desire to invest" <li data-bbox="453 1478 1353 1601">• "Perseverance, primarily there were punishments at the end of the day, if we were late for the drills in the morning, things like that, then it helps me, strengthened me since I would be more than 2-3 minutes late. This made me grow up. We wore uniforms, it is a little like being more serious, you don't do silly stuff so as not to offend the uniform". <li data-bbox="453 1635 1359 1695">• "I learned to meet time schedules, to come to the drills, and since then I am not late, and I even come five minutes beforehand" <li data-bbox="453 1729 1353 1823">• "From my perspective, the order, the times, and the coming on time, I understand this, when it is necessary to speak and when not to speak, to differentiate between recess and lesson, this is the difference". <li data-bbox="453 1856 1270 1886">• "Wearing a uniform and the entry into the program caused me to be discipline". <li data-bbox="453 1919 1359 2018">• "I primarily take the discipline, since it is important, discipline, and they instill discipline in us, and we were a problematic class and now when you see this class, there is really a difference, it is another world"

Theme The Pre-Military Activity – Empowering Dimensions

Belonging and Formation:

- "The program influences and strengthens my feeling of belonging to the class and to the IDF, all that is around helps".
- "The cohesive class contributes to the formation, there are a number of groups in the class, but they help one another".
- "They understand that they have the same task and the same goal. They know that they are in one class for themselves".
- "We are friends with one another far more than in other classes, really one for all"
- "The contribution to my military and our military".
- "The program raised my motivation to serve in the IDF, to serve in the corps, to know the corps in the profession, this gave me motivation".
- "The desire to belong to something larger than you is the central thing".

Categories

Change and Maturity:

- "The uniform instilled in me greater self-confidence, I am more disciplined, I feel less shy and more empowered".
- "The setting influenced, primarily in terms of maturity".
- "I take this rapid growing up and the importance of the studies, this made it easier for me to understand the need of investing in the studies".
- "I would greatly like to study in post-secondary studies and I did not think in the beginning to continue to learn and now I think to learn since it will help me in the continuation of life to find a job and in general".
- "This puts order in your head and makes you grow up, you are being cared for, this influences the motivation and improved it".

Theme The Pre-Military Activity – Empowering Dimensions

Support:

- "There is another body in the school, in this case the military, and it comes and adopts you, in other words, you are not alone, there is a cover of support that other people other than the teachers in the school care about you".
- "This is a concept that says, look, we give to the child a home and it is a home that hugs and shields. He has support along the way, he has support the whole time, this support is the support of the instructors, this support is learning support. There is economic

support if it is necessary, there is ideological flexibility, we are willing to deal with the difficulties".

- "My average rose from 70 to 88 because of the commanders and because of the support both in mathematics and in English".
- "I receive support always from my commander, she helps, if I need help, then I turn to her and immediately she sets with me in that same week".
- "I always received support from the class commander, he was the best guy we ever met, truly a good guy, and during the studies after two years, he finished his service and then another commander came, and she was also good but there is nobody like the commander".
- "For instance, if I did not have the scholarship, I could not have done it since my father is also supporting my sisters and my sister is also learning and because of the military I am succeeding in learning and ma doing this and there is here the support of the adopting officer and of the instructor. The officer gives us instructions and explanations and answers questions".
- "The military setting greatly helped, the scholarships helped financially, I received a full scholarship to Poland, the adopting officer helped, he took us on trips, he explained to us the story, and this helped".

Table 2. Number of References to Every Category, according to the Stages of the Analysis

Categories	Number Of Comments
Delineation of a future horizon	48 (24.7%)
Discipline	42 (21.6%)
Change and Maturity	29 (14.9%)
Belonging and Formation	39 (20.1%)
Support	36 (18.5%)

8. Discussion and Conclusions

The pre-military activity constitutes a unique model in which different government ministries are combined together (the Ministry of Defense and the Ministry of Education) and through joint activity they create a significant platform that constitutes an empowering factor for the individual and in general. This model, which was extended significantly in recent years, constitutes a source of qualitative and quantitative cultivation of the different technological systems in the Israel Defense Forces (Yanko, 2013).

In the schools where the research study was conducted it became clear that the population that takes part in the pre-military program becomes unique and esteemed, as a result of the position of the IDF in Israeli society.

The research hypothesis maintained that the pre-military activity has an impact on the motivation to continue to study, on the self-discipline, on the sense of self-efficacy, and on the motivation to perform the military service. Analysis of the initial findings shows that the analysis of the in-depth interviews conducted with the respondents supports the research hypothesis.

The cognitive social learning theory holds that the learning and perception processes are the processes that shape the individual's personality and behavior, through the reciprocal and continuous actions of the person and the environment (Bandura, 1977). This theory is expressed in actuality in the pre-military activity, whether through practice, experience, participation, and so on, in a broad variety of interactions, as reflected in the interviewees' statements.

Motivation constitutes a significant motif in the pre-military program. The different theories that explain motivation and that are different in their theoretical philosophical basis (Deci, Vallerand, Pelletier, & Ryan, 1991; Maslow, 1954; McClelland, 1961; Skinner, 1968; Weiner, 1986) are expressed as an integral part in the daily activity.

Analysis of the different research studies performed in the period 2008-2012 among 350 soldiers that examined the satisfaction of the graduates of pre-military programs in comparison to the satisfaction of regular graduates in the aspect of professional fulfillment and willingness to serve in the technological system found a significant relation between the studies in the pre-military programs and willingness for technical service (Behavioral Sciences Division: Research Department, 2012).

This significance emphasizes the importance of the pre-military program as a platform that enables, on the one hand, the existence of an educational model and on the other hand, an empowering mechanism that fits into the school system. This model allows the IDF to bridge the personnel gaps, in terms of both quantity and quality, and to promote the motivation to perform technological military service. The generation gaps between the learners (Oz & Oz, 2013) constitute a significant challenge in the ability to adjust the pre-military program and strengthen in for the future.

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