

# **European Journal of Human Resource Management Studies**

ISSN: 2601 - 1972 ISSN-L: 2601 - 1972

Available on-line at: <a href="http://www.oapub.org/soc">http://www.oapub.org/soc</a>

DOI: 10.46827/ejhrms.v5i1.1030

Volume 5 | Issue 1 | 2021

# A STUDY ON EMERGING ADULTHOOD IN HELLENIC AIR FORCE CADETS IN GREECE

Anastasios Kapogiannis<sup>1</sup>, Thanassis Karalis<sup>2</sup>i, Natassa Raikou<sup>3</sup>

<sup>1</sup>Hellenic Air Force, Air Training Command, 120 Air Training Wing & Hellenic Open University, Greece

<sup>2,3</sup>Laboratory of Pedagogical Research and Lifelong Education, Department of Educational Science and Early Childhood Education, University of Patras, Greece

#### **Abstract:**

This paper presents the findings of the research carried out at the Hellenic Air Force's 120 Air Training Wing, with the objective to define the characteristics and dimensions of emerging adulthood among student pilots during the initial and basic phase of flight training, and also to investigate the extent to which these characteristics are related to the type and content of their training. As shown by comparing the findings of the research with similar studies in the Greek context, in which students have participated, student pilots seem to be crossing the threshold of adulthood much earlier than their peers who are university students. Moreover, due to the content of their training, their views on the characteristics and dimensions of adulthood focus mostly on responsibilities and duties rather than on the rights of the adult phase of life.

**Keywords:** emerging adulthood, military education, Hellenic Air Force, student pilots, higher education

#### 1. Introduction

The study of adulthood, the gradual integration into this phase of life, the characteristics of being adult and the learning possibilities attributed by the latter, are some of the most interesting research areas in the field of adult education and lifelong learning. The issue of transitioning to complete adulthood, the period that this happens, and where exactly

-

<sup>&</sup>lt;sup>i</sup> Correspondence: email <u>karalis@upatras.gr</u>

the age threshold is placed for this transition, are all questions which have concerned the researchers of adult education for more than a century. When studying the literature (see indicatively: Knowles, 1970; Brookfield, 1986; Merriam & Caffarella, 1999; Jarvis, 2010; Rogers & Horrocks, 2010), a global convergence emerges on the idea that the adult state is not defined according to the traditional criterion of age of maturity. This criterion is, after all, not the same throughout different eras and societies, whereas the age at which someone may be considered as an adult may differ even within a society. It is now widely accepted in the relevant literature that setting a countable age limit cannot indicate the point in a person's life at which s/he can be considered as an adult. In order to consider a person as an adult, we should examine whether this person is in the state of adulthood (Kokkos, 2005), while there is a wider consensus among researchers as far as the critical importance of assuming roles and responsibilities for the transition to adulthood is concerned.

This paper's main interest revolves around a question which, as shown by the overview of the relevant literature, has not been extensively investigated up until now. The training of officer cadets in Greece takes place at an age which, in most western societies, is directly linked to the transition to adulthood. The fact seems to be that taking on roles and responsibilities is more intense for officer cadets, as a part of their training, compared to their peers, who study, for example, at colleges and universities. For some of the officer cadets though, as is the case of the student pilots, their responsibilities burden increases enormously due to their task of handling high value – high risk weapons. Therefore, the exploitation of the findings of this research is twofold. Firstly, it is important for the military studies that provide us with data for the way in which officer cadets, and more specifically, student pilots may be more efficiently trained. Secondly, it provides data to the study of emerging adulthood and highlights factors that potentially contribute to reaching adulthood.

# 2. Adulthood and emerging adulthood

The characteristics of adulthood constitute one of the main pillars of theoretical and research orientation ever since the classical theorists of adult education. The founder of this scientific field, as is widely considered, E. Lindeman in his seminal work *The meaning of Adult Education* (1926) defines many of the characteristics of adulthood underlying that it is not the fact that it is restricted to adults that gives adult education its name, but the fact that the adulthood and maturity of the learners define its limits. After approximately forty years, the classical theorist of adult education M.S. Knowles, starting from Lindeman's work and formulating the theory of andragogy, states four basic characteristics of adults that differentiate them from children or adolescents. In particular, he suggests that (a) adult self-perception moves from a depended personality towards a self-determining individual, (b) adults have a constantly developing pool of experiences which constitute a constantly developing source for learning, (c) their readiness for learning is gradually orientated towards the components of the social roles they take on, and (d) they feel the need for direct application of everything they learn and

their orientation towards learning is gradually shifted from the focus on subject matters to the focus on the problems they face (Knowles, 1970).

According to international literature, which has already been mentioned, it can be established that the typical age criterion is not enough to define the adult state and the criterion which characterizes the individual as an adult is the extent to which s/he is in the state of adulthood. The key idea behind the word "adult" is that of *maturity*. Maturity is not a mere state but an ideal, which is mostly pursued rather than totally attained. The word "adult" contains the idea of full development, personal maturity and the exploitation of all the individual's abilities. One of the elements of adulthood among people considered as adults, is *responsibility* (Rogers & Horrock, 2010). In this state, the individual is responsible for himself/herself, for his/her actions and evolution. Often adults feel responsible for others as well, but they certainly do for their actions and reactions. According to the above, adulthood indicates some degree of *autonomy*, responsible decision making, intentional and not unintentional behavior.

J. J. Arnett's theory about emerging adulthood is nowadays the most up to date approach referring to the transition to adulthood. According to Arnett (1998, 2000, 2004), the transition from the period of adolescence to the one which a person is in the state of adulthood, does not take place directly. Especially in Europe, widespread unemployment (Arnett, Žukauskienė & Sugimura, 2014), postponement of marriage to a later age and the prolonged dependence of children on their parents (Arnett, 2000; Bjarnason & Sigurdardottir, 2003; Petrogiannis, 2011; Leontopoulou, Mavridis, & Giotsa 2016), has moved this stage approximately to a person's late 20's (Arnett et al., 2014; Bynner, 2005). Nowadays, the time required to fulfill this kind of transition, is a distinctive and special period in a person's life. According to Arnett (2000), during this period five characteristics are dominant, which are often mentioned in literature as the five dimensions of emerging adulthood (Leontopoulou et al., 2016; Zorotovich, 2014).

The first one is the fact that this is a period of *identity exploration*, during which young people try out new possibilities regarding what kind of people they want to become and what kind of life they want to live, mostly as far as their interpersonal relationships, their job and their ideology are concerned (Arnett, 2000, 2004). According to Erikson's human development theory (1968), identity exploration is typically related to adolescence. Nevertheless, nowadays the researchers in the field of psychology believe that, although the initial phase of identity exploration among young people takes place in the end of adolescence, its main part occurs during the period of emerging adulthood. This is a period, during which most people ponder carefully on the commitments they shall take on, in order to define the structure of their adult life, regarding their love relationships and their job. These commitments are fulfilled mainly around the age of 30 (Arnett, 2000, 2004).

The second characteristic of this period is *instability*. The period of emerging adulthood is probably the most unstable period of a person's life. It is the period during which frequent and constant changes appear in their personal and work life. Most young people who undergo this period, are usually involved in short-term, monogamous relationships. As far as work is concerned, the average number of job changes in the USA

for ages 18-29 is eight, much higher than any other period in people's life. This instability is mostly due to the intrinsic search for identity of young people, however, in many cases it is unintentional, as young people's relationships may stop because their partners have broken up with them, or their job might have changed because they were fired from their previous employment (Arnett, 2000).

The third characteristic is the fact that it is the *most self-focused* period of a person's life. The period of emerging adulthood is when young people focus mostly on themselves, in the sense that they do not have many responsibilities and only a few daily tasks. Children and adolescents must cope with the demands of parents and school. Adults have to fulfill their duties towards their children, their spouses and their employers on a daily basis. However, young people who are going through the period of emerging adulthood, even though they have some responsibilities, these are clearly fewer than in any other period of their lives. Finally, although they may have a certain job, the times they change their workplace during the period of 18-29 years, does not pose particular obligations on them towards their employers (Arnett, 2004; Arnett et al. 2014). The fourth characteristic is that they feel they are in-between. In this period of their life young people cannot define themselves neither as an adolescent, nor as an adult, but somewhere in-between. This feeling of intermediate state, between adolescence and adulthood, may come from the elements that young people think that determine adult life, such as "taking on responsibilities" and "the ability to make independent decisions", which cannot be acquired at once, but only after a gradual and slow process (Arnett, 2004, 2014).

The fifth and final characteristic is the fact that this is a period of *possibilities and optimism*: a period during which hopes to grow and people have an unrepeatable opportunity to transform their lives. Although during the period of emerging adulthood, young people face many difficulties and mixed feelings, almost all of them think that their future is bright. Arnett (2000) believes that emerging adulthood is not a period of growth applicable to all people instead, it emerges under certain circumstances which have been observed in modern times and only in some cultures of the developed world, which provide young people with the "luxury" to explore new possibilities and various alternatives for their lives (Petrogiannis, 2011). Thus, the period of emerging adulthood is experienced by the young people of our era, mostly in industrialized societies of the western world, but also in specific Asian countries, such as Japan and South Korea.

The variations in the socio-economic status which are found even within a prosperous community, may determine to which extent its young people will experience the period of emerging adulthood. Since chances tend to be less for minorities in the industrialized societies, the young people of minority groups have less possibilities to go through the period of emerging adulthood (Arnett, 2004). Due to the massification of tertiary education in the last decades, it goes without saying that universities are environments where a large part of the transition to adulthood takes place (Raikou & Karalis, 2011, Raikou, 2012). While in the Greek context there are a few researches for emerging adulthood (Petrogiannis, 2011; Leontopoulou, et al., 2016; Galanaki & Leontopoulou, 2017; Galanaki & Sideridis, 2018, Tsipianitis & Karalis, 2018; Ismyrlis,

2019; Raikou, 2020), we did not find in the literature any relevant studies, concerning the case of training officer cadets in Greece, which in fact is of situated kind (Karalis, 2010). Even in international literature, only one article was found (Lavi, 2020), which focused on the relation of substance use and not on training and its importance for and effect on emerging adulthood.

## 3. The training program of the Hellenic Air Force

This study focuses on the case of the young cadets training to become fighter pilots of the Hellenic Air Force. In order to understand the effect of the emerging adulthood period on the young people who must be trained in special training programs, such as that of fighter pilots, it would be necessary to make a brief description of the program (Kapogiannis, 2017). The trainee, after entering the Hellenic Air Force Academy embarks on a difficult learning path, orientated towards both academic and flight training. The training syllabus includes research and teaching on aviation science and technology, as well as the relevant theoretical and applied sciences. The first flight training takes place while attending the Hellenic Air Force Academy and lasts for approximately four months. During the fourth year on the Academy or immediately after graduation and promotion to the rank of second lieutenants, the student pilots are transferred to the 120 Air Training Wing (120 ATW) for the next phase of their flying education. The training program at the 120 ATW includes five phases, each with a different duration, which are consecutive and characterized by a constantly growing difficulty and gain in expertise. The objective of every phase is briefly described afterwards<sup>ii</sup>:

*Initial Phase*: The objective of this phase is the acquisition of knowledge and the development of the trainee's abilities in basic procedures, maneuvers and the handling of the aircraft's systems, standardization, compliance with safety rules and decision making under all flight circumstances, in relation to human physiology.

*Basic Phase*: The objective of this phase is the further improvement of the trainees' knowledge, abilities and skills, which were acquired during the initial stage, the development of leadership skills, fostering of team spirit and improvement of the ability to handle information and of situation awareness, setting the foundations for the development of their aviator personality.

Advanced Transport Aircraft Phase: The aim of this phase is the further improvement of the trainees' knowledge, abilities and skills, which were acquired during the basic phase, the fostering of team spirit and crew cooperation, improvement of the ability to handle information and of situation awareness, so that they successfully fulfill the duties and responsibilities of a pilot of the Hellenic Air Force transport aircrafts.

Advanced Fighter Aircraft Phase: The aim of this phase is the acquisition of in-depth aviation knowledge, the development of the trainees' abilities and skills in a highly

<sup>&</sup>lt;sup>ii</sup> All information concerning the training of student pilots is unclassified and was retrieved from the official site of Hellenic Air Force (www.haf.gr).

demanding environment of flying jet aircraft, as well as the full development of their aviator personality.

Operational Phase: The aim of this phase is the acquisition of in-depth aviation knowledge and the development of abilities, skills, orderly thinking and behavior on the part of the trainees, as far as the main principles, procedures and maneuvers are concerned, which are dictated by the planning, tactics, use of weapons and systems during air operations.

It is apparent from the above description of the training syllabus of fighter pilots that it is a rather demanding course for the trainees, from the first day of their training until they finally graduate several years later. The intensive program in combination with their ambitious goals and high demands set in a strict, specified educational context, creates special circumstances for the young cadets. After completing their training at 120 ATW, the pilots assume operational action in their assigned Squadron (Fighter, Firefighting, Transport and Helicopter).

# 4. Methodological issues

The aim of this research is to investigate the relation between the period of emerging adulthood experienced by young people and the training of new fighter pilots of the Hellenic Air Force, in order to detect and understand the factors and parameters that influence the former. The main research questions regard how emerging adulthood is related to the effective training of young pilots, as well as how the characteristics of the period of emerging adulthood affect the development of motives for the successful completion of the training of the Hellenic Air Force fighter pilots.

The population of the research consisted of 81 student pilots (77 men and 4 women), in order to investigate the relation between the period of emerging adulthood as experienced by young people today and the training of new fighter pilots of the Hellenic Air Force, in order to detect and understand the factors and parameters that influence the former. The time period of the research lasted from December 2017 until March 2018, when four classes of student pilots were trained at 120 ATW, in all of the five aforementioned training phases. From the overview of Greek and international literature, it became clear that the stage of emerging adulthood includes a large number of factors which affect the way in which young people participate in the educational procedure. Especially in the field of armed forces, the study of the influence of the phenomenon is still in its infancy. The research procedure included five distinctive stages:

- a. The stage of determining the participants to be studied,
- b. The stage of ensuring the permission required for the research,
- c. The examination of the information collected from various sources available to us (literature, electronic databases, participants, personal experience)
- d. The selection of the research tool to be used, through which the useful data for our study shall be obtained
- e. The application of the collection and sorting procedure for data processing.

At the same time, during the creation of the above mentioned "road map", we decided that the most conducive way for data collection would be the use of a questionnaire that is available and suitable to our case. For the case of the emerging adulthood, the corresponding questions of Arnett's questionnaire (IDEA – Inventory of the Dimensions of Emerging Adulthood) were used, which has been used in other researches in Greece. Specialized questions were also added to this questionnaire concerning the way and phases of training the student pilots. This questionnaire is divided into five pillars. In the first part, demographic data are collected, while in the second, third and fourth part the corresponding research questions, which poses our study, are examined. Finally, in the fifth part, through open ended questions, the researcher attempts to collect qualitative data for the research, aiming at the better interpretation–explanation of the results and the clearer understanding of any convergence or divergence that may arise.

The way in which information-data collection was carried out, was by answering to thirty-nine (39) closed-ended questions regarding the quantitative data and three (3) open-ended questions regarding the recording of qualitative data. As for the formulation of questions, it was made sure that they are clear and simple, while the Likert scale was mostly used, with values from 1 to 5, where 1 corresponded to the concept of "totally disagree" and 5 to the concept of "totally agree". The research was carried out after permission was granted by the 120 ATW Wing Commander and the Hellenic Air Force General Staff, while the consensus of student pilots and their voluntary participation in the research were ensured. The specific sample was chosen by the researcher, since it was available in its entirety, convenient concerning its willingness to participate, and representative of the population of interest. All the participants were informed about the study by the researcher, and through the chief cadet of every class, email addresses were gathered, to which the research tool was sent. The selection of the initial pilot sample of ten people was random and after feedback was received the research continued to the rest of the sample. It should be noted that the participants showed voluntarism and interest for their participation in the research.

# 4.1 Presentation and discussion of findings

Regarding demographic data, as for the gender, the majority of the participants were men (95.1%), which is expected as the percentage of women student pilots in Greece is still rather low but steadily growing. As for the marital status of the participants, the vast majority are single (97.5%). Finally, as for their accommodation, a little more than half of them (54.3%) live on their own, one third (33.3%) share a flat, while the others (12.3%) live with their parents.

As for the first research question, it is a fact that the training of the Hellenic Air Force fighter pilots, who soon shall be called to assume especially increased responsibilities in their professional career, takes place at the "critical age" of 22-26 years (Arnett, 2000, 2004), which is a period of their lives when they experience the transition to adulthood. As a result, we assume that these young people are "forced" to differentiate themselves from their peers, who have the "chance" to remain in the stage of emerging

childhood for more time. Our attempt focused on verifying the above assumption, concerning the important effect and difficulties that seem to be caused by the forced adaptation of the new trainees, in a rushed entrance into adulthood, and on determining as precisely as possible, the points which display notable influences. The conclusions that were drawn from the above, arose from processing the participants' answers regarding some adult characteristics, such as the age limit established by the State, financial independence, assuming responsibilities, independence from family home, marriage and creation of family, responding to difficulties and driving safely and wisely.

The participants were ambivalent about the age limit of 18 years, established by the State, as an indication of entering into adulthood, since their answers showed that they realized the characteristics an adult should have, but they found it hard to dissociate them for this particular age. As for the findings on the characteristics that the participants think that an adult should have, these partly confirm the conclusions that were drawn in the relevant researches of Arnett (1998, 2000, 2004) and Petrogiannis (2011). Assuming responsibilities (97.5% - Petrogiannis: 89.9%), responding to difficulties (79% - Petrogiannis: 88.9%) and driving safely and wisely (58.1% - Petrogiannis: 50.0%), were close to the results that the aforementioned studies yielded, while the percentage of financial independence was lower (70.3% - Petrogiannis: 82.8%). Finally, a large difference among findings can be observed regarding independence from family home (80.3% - Petrogiannis: 53.3%) and marriage and creation of family (50.7% - Petrogiannis: 29.1%), something that is probably due to the particularity of fighter pilots as officers, i.e., to leave their homes early in order to be integrated into the military environment.

In an attempt to associate all the above with the training of the Hellenic Air Force fighter pilots, we have recorded the participants' opinions on questions concerning the assumption of responsibilities in an early stage of their lives, the ability to respond to requirements, the "pressure" they feel, how they view themselves in relation to their peers, their faith in their potential, their faith in their choices and their attitudes towards taking responsibilities.

By processing the above, it was established that young trainees consider the training program of the Hellenic Air Force especially demanding, however, despite the pressure and the high demand to cope with its difficulties, they strongly believe that they have made the right choice (91.3%), assuming to a great extent the responsibilities of their decision (80.2%). These findings coincide with the corresponding conclusions of the research by Tsipianitis & Karalis (2018), in which the corresponding figure fluctuates around 85%. The conclusion to be drawn, by comparing other available data in the context of Greece, is that student pilots seem to have the same view as their peers who are university students in Greece, about adults, adulthood and its characteristics. However, a significant variation between student pilots and their peers appears regarding the extent to which they consider themselves as adults, meaning they have developed the characteristics of adulthood, what is also called subjective transition to adulthood or perceived adult status. In the question "do you think you have reached adulthood", 74.1% of them chose the answer "yes", 1.2% the answer "no" and 24.7% the answers "in some respect yes" and "in some respect no". As it can be concluded from the

data of other researches in the Greek context, the answer "yes", i.e., the clear choice that they feel like adults, ranges between 15.6% and 37.7% for the university students (in the oldest research among them), while the incapability of a clear choice ranges from 59.3% to 80.7%. It becomes apparent, therefore, that student pilots feel adults in rates two to five times higher than their peers and this should be attributed, on the one hand, to the kind of education they have received and, on the other hand, the feeling of responsibility that is derived from their new role. This can be concluded from their answers to the question "do you think that training as fighter pilots causes a precipitation of your adulthood?", where positive answers amount to 87.1% of the sample.

**Table 1:** Perceived adult status in various studies in Greece

Study/Researchers	Sample	Yes (%)	In some respect yes, in some respect no (%)	No (%)
Petrogiannis, 2011	183 undergraduate students from various Departments of the University of Ioannina and the Technological/Vocational Institute, Ioannina, Greece	37.7	59.3	3.0
Galanaki & Leontopoulou, 2017	784 undergraduate students from various Departments of the National and Kapodistrian University, Athens, Greece	15.6	71.4	13.0
Galanaki & Sideridis, 2018	814 undergraduate students from various Departments of the National and Kapodistrian University and the Athens University of Economics and Business, Athens, Greece	27.4	62.7	9.9
Tsipianitis & Karalis, 2018	332 undergraduate students from two Departments of the University of Patras, Patras, Greece	16.9	80.7	3.3
Raikou, 2021	119 undergraduate students from the Department of Educational Science and Early Childhood Education of the University of Patras, Patras, Greece	25.2	73.1	1.7

From the spontaneous answers given to the open-ended question regarding the characteristics of adults, it is clear that student pilots dissociate the concept of adulthood from its traditional conditions or dimensions, such as age or voting right (see Table 2, in the last two rows, where all the characteristics that have been mentioned only once or twice, respectively, are presented). When describing the characteristics of adulthood, special emphasis is put on responsibilities / duties, which we can easily assume that it is the result of their training and the view they have on being a military officer and more specifically a fighter pilot. Although almost all the choices they mention are characteristics of adulthood, it is rather impressive that the rights of adulthood are limited to three to four quotations.

#### Anastasios Kapogiannis, Thanassis Karalis, Natassa Raikou A STUDY ON EMERGING ADULTHOOD IN HELLENIC AIR FORCE CADETS IN GREECE

**Table 2:** Characteristics of adults

Characteristic	References
Assuming responsibilities	36
Maturity	21
Independence	21
Responsibility	14
Financial independence	9
Critical and creative thinking	6
Age (18 years)	4
Accomplished personality	4
Understanding of duties	3
Facing challenges-difficulties	5
Determining and achieving goals	3
Leaving the family home, determination, gaining experience	2
Finding solutions, interest for other people, inspiring trust, undertaking initiatives,	1
voting right, logic, decision making, realism, integrity, patience, seriousness,	
recognizing mistakes, consistency, courage	

At a following open-ended question the participants were asked to choose which of the characteristics of adulthood are necessary to complete this particular phase of their training (see Table 3, where only the characteristics that were quoted more than 4 times are presented). We think that their choices here confirm what was mentioned before, i.e., the demands and the content of their training have shaped their personality to a great extent and therefore their perception of adulthood. Some of the characteristics they mention are more *personality qualities* rather than *characteristics or dimensions of adulthood*. A rather significant finding is that the traditional concept of military education, discipline, was quoted only three times, since, as it appears, it is not defined as an external imposition but rather as an intrinsic and intentional motivation (see, for example, the characteristics: responsibility, determining and achieving goals, patience, consistency).

**Table 3:** Crucial characteristics for their training

Characteristic	References
Maturity	26
Responsibility	19
Determining and achieving goals	15
Assuming duties	12
Patience	11
Determination	10
Self-confidence	8
Seriousness	7
Facing challenges and difficulties	5
Critical and productive thinking	4
Independence	4
Consistency	4
Ability to concentrate	4

An interesting element that emerged was the variation in the participants' opinions concerning their readiness to commit to a long-term relationship (45.6%), compared to that of becoming parents (64.8%). The finding of lack of readiness to become parents, confirms the fact that the trainees who are in the "critical" age of 22-27 years, are going, like their peers, through the period of emerging adulthood (Arnett, 1999, 2000, 2004, 2014) and that possibly they are "forced" due to the high demands of the training to show characteristics of adulthood, in order to be able to cope.

The fact that the participants already feel like officers, seems to have a negative impact and reinforces the characteristics of emerging adulthood (identity exploration, instability, self-focus; Arnett, 2000, 2004, 2014), intensifying their reluctance to create a family, since the difficulties embedded in being an officer (multiple transfers, exercises, unstable working hours), deter them from being eager to assume this kind of robust roles. In our attempt to link the above-mentioned characteristics of emerging adulthood to what constitutes a motive for the successful completion of the training, we have recorded the participants' opinions to questions concerning earnings, distinction among colleagues, personal satisfaction of successfully achieving a goal, acquisition of new knowledge and skills, gaining confidence in their abilities and improving their self-esteem.

An interesting fact is that earnings do not constitute a clear motive for the successful completion of the training program. This finding diverges from what is stated in the research by Galanaki & Sideridis (2018), who came to the conclusion that, gaining financial independence has been considered as the most important characteristic of adulthood by the majority of Greeks for a very long time. In order to interpret this divergence, it should be noted that the participants in this research are already financially independent.

The trainees also take a vague attitude (neither agree nor disagree 38.3%) regarding the distinction among colleagues, since in a high-demanding training environment one would expect the development of competition culture and fair play. Personal satisfaction of successfully fulfilling a goal (95%), acquisition of new knowledge and skills (95.1%), gaining confidence in their strengths (97.5%) and improvement of their self-esteem (90.1%) seem to be the main motives that urge young fighter pilots to successfully complete the flight training program – all of the above, after all, are a fundamental part of their training, and officer required qualities.

#### 5. Conclusions

To sum up, we believe that the results of this particular research may constitute a tool, which, on the one hand, will make the designers of military training programs aware of the concept of emerging adulthood while, on the other hand, will provide relevant data in order to realize the objective difficulties of the training and the new dimensions of it, which they will be required to include to their basic design process. The results that were produced largely coincide with the findings of relevant researches concerning emerging adulthood, more specifically the ones in the Greek context, with the aforementioned

variations being mainly due to the kind of training, which is demanding, difficult and clearly "forces" young cadets, who could undoubtedly be considered as emerging adults, to manifest adult characteristics.

As it has already been noted, this particular research has several restrictions. Due to the particularity of flight training together with the military environment in which it was conducted, we were confronted on a daily basis with constant filtering of the data and information, in an attempt to ensure their confidentiality, something totally expected in the field of Armed Forces. Another restriction of this particular research was the lack of a large number of women, because of the distinctiveness of this specific training. Although the timing of conducting the research gave us the possibility to include four women in our sample (quite rare for this kind of training), this number falls far short of the researches which were carried out with students of university departments as sample, in some of which (Petrogiannis, 2011; Galanaki & Sideridis, 2018) significant differences are found between the two genders, as far as the transition to adulthood is concerned, with women showing more mature characteristics compared to men. It is, therefore, desirable, for future research to be extended to other demanding training areas of the Armed Forces, where the number of women in the sample will be higher, in order to draw more accurate objective conclusions. Furthermore, we think that it would be interesting to carry out relevant researches at the Air Forces of other countries.

Based on the results of the research, we believe that some important conclusions can be drawn in two levels. The first one concerns the military training of the Hellenic Air Force itself, since student pilots, despite the fact that they, indeed, go through the period of emerging adulthood, display a high percentage of sound and mature judgement, ability to acknowledge the characteristics required for someone to be an adult, emphasizing on the responsibilities and duties of adulthood. In addition, they choose to adjust to the high demands of the training, showcasing with this attitude clear samples of maturity and adulthood characteristics, which is a positive prognostic factor in their response to the complex role they have to assume. The second conclusion concerns the scientific field of adult education, since the considerable variation in the perceived adult status compared to their peers, confirms the body of theoretical knowledge of the specific field, according to which assuming roles, responsibilities and duties are the main requirements in order to consider someone as an adult in the society s/he belongs to.

#### **Conflict of Interest Statement**

The authors declare no conflicts of interests.

#### About the Authors

Anastasios Kapogiannis, MA in Adult Education (Hellenic Open University) is an active Hellenic Air Force (HAF) Pilot serving with the rank of Lt. Colonel. He has been assigned as a Fighter Pilot flying A-7E Corsairs and as an Instructor Pilot flying T-6A Texan II. He is an active Air Crew evaluator, a T-6 testing Pilot and a Testing Pilot for the Hellenic Aviation Industry. From 2013 to 2015 he was a HAF demo pilot and Leader of the

"Deadalus" Demo Team. From 2011 up to 2019, he has completed the roles of flight leader, Director of Operations and Squadron Commander of 361SQN. He holds an MA in "Adult Education" from the Hellenic Open University.

**Thanassis Karalis** is Professor of Lifelong Learning and Adult Education in the Department of Educational Science and Early Childhood Education at the University of Patras. He is Director of the Laboratory of Pedagogical Research and Lifelong Education, member of the Quality Assurance Unit and coordinator of the Center for Teaching and Learning at the University of Patras. His research interests include adult and higher education, planning and evaluation of non-fromal education programs, distance education and e-learning.

**Dr. Natassa Raikou** is Teaching Staff in Adult and Higher Education at the University of Patras and Tutor-Counselor at the Hellenic Open University. She has a long teaching experience on higher education and teachers training programs, with publications in international and Greek journals. She is also member of several International and Greek scientific networks. Her research interests include adult education, university pedagogy, transformative learning, emerging adulthood and critical reflection.

#### References

- Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development*, 41, 295-315.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-480.
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press.
- Arnett, J. J., Žukauskienė, R., & Sugimura, K. (2014). The New Life Stage of Emerging Adulthood at ages 18 to 29 years: implications for Mental Health, *THE LANCET Psychiatry*, 1(7), 569-576.
- Bjarnason, T. & Sigurdardottir, T. J. (2003). Psychological distress during unemployment and beyond: social support and material deprivation among youth in six northern European countries, *Social Science & Medicine*, *56*(5), 973-985.
- Brookfield, S. (1986). *Understanding and facilitating adult learning*. San Francisco: Jossey-Bass
- Bynner, J. (2005). Rethinking the youth phase of the life course: the case for emerging adulthood. *Journal of Youth Studies*, *8*, 367-384.
- Erikson, E. H. (1968). *Identity: Youth in crisis*. Austen Riggs Monograph, No. 7. New York: WW Norton.
- Ismyrlis, V. (2019). Emerging adulthood's characteristics in Greece in the face of economic adversity, *Educational Journal of the University of Patras UNESCO Chair*, 6(2), 71-81.
- Jarvis, P. (2010). Adult Education and Lifelong Learning (4th). New York: Routledge.
- Kapogiannis, A. (2017). Pilot Training in Greece of 21<sup>th</sup> Century. Training New Social Cohorts. *Air Force Review (Aeroporiki Epitheorissi)*, 117, 97-114. [In Greek].

- Karalis, T. (2010). Situated and Transformative learning: exploring the potential of critical reflection to enhance organizational knowledge, *Development and Learning in Organizations*, 24(1), 17-20.
- Knowles, M. S. (1970). *The Modern Practice of Adult Education: Andragogy Versus Pedagogy*. New York: Association Press.
- Kokkos, A. (2005). Adult Education: detecting the field. Athens: Metechmio. [in Greek]
- Lavi, T. (2020). Influence of Instability on Substance Use Prevalence in Emerging Adult Active Duty Military Members and Veterans, *Journal of Undergraduate Social Work Research*, 4(1), 53-62.
- Leontopoulou, S., Mavridis, D. & Giotsa, A. (2016). Psychometric Properties of the Greek Inventory of the Dimensions of Emerging Adulthood (IDEA): University Student Perceptions of Developmental Features, *Journal of Adult Development*, 23, 226-244.
- Lindeman, E. C. (1926). The Meaning of Adult Education. New York: New Republic.
- Merriam, S. B., & Caffarella, R. S. (1999). *Learning in adulthood: A comprehensive guide*. San Francisco: Jossey-Bass.
- Petrogiannis, K. (2011). Conceptions of the transition to adulthood in a sample of Greek higher education students. *International Journal of Psychology and Psychological Therapy*, 11(1), 121-137.
- Raikou, N., & Karalis, T. (2011). Exploring the potential of Transformative Learning in Higher Education: the development of students' critical thinking through aesthetic experience, 9th International Conference on Transformative Learning, Athens, 28-29 May 2011. In M. Alhadeff-Jones, & A. Kokkos (eds.), Transformative Learning in Time of Crisis: Individual and Collective Challenges (261-267). Athens: Columbia University and Hellenic Open University.
- Raikou, N. (2012). Can University Be a Transformative Environment? Fostering Critical Reflection Through Art in Higher Education, *Journal of Literature and Art Studies*, 2(3), 416-421.
- Raikou, N. (2020). Approaching Contemporary Higher Education in Greece Through the Lens of University Pedagogy: What is the Role of Adult Education in this Context? In A. Bulajic, T. Nikolic, & C. C. Vieira (eds.), *Navigating through Contemporary World with Adult Education Research and Practice* (319-335). Belgrade: Institute for Pedagogy and Andragogy, University of Belgrade, ESREA, Adult Education Society Serbia.
- Raikou, N. (2021). *Investigating the dimensions of emerging adulthood in student teachers at a Department of Education in Greece*. Manuscript submitted for publication.
- Rogers, A., Horrocks, N. (2010). *Teaching Adults* (4<sup>th</sup>). Berkshire: Open University Press.
- Tsipianitis, D., & Karalis, T. (2018). An investigation of emerging adulthood in Greek higher education students, *Educational Journal of the University of Patras UNESCO Chair*, 5(1), 47-57.
- Zorotovich, J. R. (2014). *Five Dimensions of Emerging Adulthood: A Comparison Between Students, Nonstudents, and College Graduates.* (Doctoral Dissertation). University of Tennessee. Retrieved: <a href="http://trace.tennessee.edu/utk\_graddiss/2881">http://trace.tennessee.edu/utk\_graddiss/2881</a>.

## Anastasios Kapogiannis, Thanassis Karalis, Natassa Raikou A STUDY ON EMERGING ADULTHOOD IN HELLENIC AIR FORCE CADETS IN GREECE

#### Creative Commons licensing terms

Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Management and Marketing Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a Creative Commons Attribution 4.0 International License (CC BY 4.0).