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MEASURING HOPE IN HEALTHCARE: A STUDY OF THE SNYDER HOPE SCALE AT AN ATHENS FACILITY

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Abstract

This research contributes to the study of the trait of hope, focusing on the Snyder Hope Scale. It begins by examining the fundamental aspects of hope theories spanning various disciplines, from medicine to psychology. Subsequently, the core tenets of Snyder's theory and the scale he developed for hope measurement are explored. The study implemented the scale in a large private hospital in Athens, where participants completed questionnaires both before and after a corporate training seminar. The research aims to investigate whether the seminar has led to increased hope levels among the participants and how the hospital managers perceived this initiative.

Keywords: Hope trait, Snyder Hope Scale, Corporate training, Private hospital, Hope measurement

1. Introduction

This research is a contribution to the study of the trait of hope and in particular of the Snyder Hope Scale. Initially, the basic elements of the main theories of hope that cover a wide range of science from medicine to psychology are examined. Then the basic features of Snyder‟s theory are studied as well as the scale he has established for measuring hope. The scale was implemented in a large private hospital in Athens where participants were asked to complete questionnaires before and after the training in the context of a corporate training seminar. The purpose of the research is to show whether the seminar has resulted in raising the level of hope for the participants, but also whether the hospital managers positively assessed this effort.

2. The trait oh Hope: Theoretical Framework& Literature review

In 1975, Seligman noted the tendency of many people when experiencing difficult situations in their lives, to adopt a passive attitude without being able to do anything fruitful for their future. These cases are of major research interest - apart from their obvious psychological impact –since they can be explained as interaction of genetic and biological factors (Korn et al. 2014). Note that even in ancient years the famous doctor Hippocrates had noted the correlation of psychological state with human health (Kalachanis & Michailidis, 2015; Kalachanis, 2019).

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These people also experience cognitive difficulties, since they have actually been "taught" to be unhappy (Learned Helplessness (-H). On the other hand, learned optimism (LO) has the opposite effect in this situation (Seligman, 1991; Seligman 2011). The real difference between the pessimistic (who sometimes has symptoms of depression) and the optimistic is the better management on the part of the latter, with immediate consistency and improvement of his lifestyle. In addition, the optimist is also more susceptible to "teaching" skills that will help him to adopt a more constructive attitude for his life, even if in some cases he feels more pessimistic (Seligman, 2011). So, Psychology expands its interest in helping people manage their problems more effectively, optimistically, and positively. It is therefore assumed that positive emotions motivate a person to evolve, be active, and achieve his or her goals (Peterson, 2000) with respect to his experiences and their characteristics.

The concept of hope, however, is unambiguous, as there have been various attempts in scientific literature by authors and researchers from different scientific fields who have tried to interpret the concept of hope differently. In this context it is considered as appropriate to present the main approaches to the concept of hope.

2.1 The Model of Reasonable Hope

Weingarten (2010) was aware of the trait of hope as an inadequate means of family therapy. Healso points out that many therapists who deal with family issues, although acknowledging the importance of hope, did not produce a large number of scientific articles, so literature is not enough.

In addition, during the second half of the 20th century, clinicians considered hope not as matter of therapy but merely as a field of Theology and Philosophy. An important milestone was in1959 where Karl Menninger highlighted the relationship of hope with Psychology submitting a paper in American Journal of Psychiatry.

In this context, Weingarten (2010) is trying to set up a new framework for the interpretation of hope that is effective for therapists and suiting with the modern way of life. He therefore speaks of the practice of Reasonable Hope (RH), which suggests that something both sensible and moderate, directing our attention to what is within reachable rather than being desired but unattainable. Main attributes of RH are that it is based on the relations between individuals because of the social nature of humans thus also including actions rather than wishing.

2.2 The role of Hope into Psychopathology

Erickson, & Paige, A (1975) have introduced the role of Hope in Psychopathology after having studied Stotland"s theory of hope & psychopathology and psychiatric treatment according to which hope includes adaptive action and positive relationships (Stotland, 1969). The authors in their quantitative research investigate the probability that a lower prospect for a goal attainment (especially when a goal is of great importance) may cause anxiety to an individual who needs to undergo a treatment. In order to perform the research the authors used a hope scale consisted of 20 goals frequently set in our everyday life. The results showed that there is a strong connection between psychopathology and lower estimates of perceived probability of goal attainment especially to individuals.

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2.3 Hope in healthcare: an application in Lung cancer

Berendes et al. (2010) examined the possibility that hope may be important in explaining the variability in patient's different adaptations in cases of serious diseases such as lung cancer. According to their theory people with high levels of hope are able to think about the pathways to goals (pathways) and feel confident that they can pursue those pathways to reach their goals (agency). For this purpose they assumed that higher levels of hope, as measured by Snyder et al."s hope scale, may result in lower levels of pain and other lung cancer symptoms (i.e., fatigue, cough). Also there is the possibility of positive psychological states limiting the action of negatives (i.e., depression). Sampling of their study (n = 51) consisted of participants diagnosed with lung cancer. All participants provided demographic and medical information and completed measures of hope, lung cancer symptoms, and psychological distress. Indeed the results of their research showed that hope was inversely associated with major symptoms of cancer (i.e., pain, fatigue, cough) and psychological distress (i.e., depression) .

3. The Snyder Adult Hope Scale

3.1 Theoretical framework

One of the most significant milestones in the study of the trait of Hope is the research of Snyder et al (1991) who define Hope as a composition of a reciprocally derived sense of successful (a) agency (goal-directed determination) and (b) pathways (planning of ways to meet goals).According to earlier literature, hope usually states that something desirable may happen, with the parameter of its meaningful target. In addition, most authors support the view that hope is primarily about achieving goals, but not stating how quickly those goals will be achieved (Cantril, 1964; Erickson, Post, & Paige, 1975;). Obviously this view differs from that expressed by Tillich (1965) who mentioned how difficult it is for a wise man to accept hope in relation to a fool who is obviously more receptive to such stimuli.

My mentioning the notion of goals Snyder has divided it in 2 major types of goals which in turn are divided into several categories (Snyder, 2002):

1. POSITIVE GOAL OUTCOME: a) envisioned for the first time. B) pertain to the sustaining of a present goal. C) desire for a further goal as soon as there is any progress .
2. NEGATIVE GOAL OUTCOME: a) deterring so that it never appears b) deterring so that its appearance is delayed.

Moreover Snyder (2002) speaks about the importance of paths for high hope individuals who always pursue their target in a more decisive way and are capable of creating alternative routes in case of encountering problems. On the other hand there are low hope people who lack the ability of finding alternative ways in order to solve a problem. Add to that the emotions that are expressed in people and ultimately affect their behaviors.

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The notion of hope, however, was perceived as related to this optimism. Scheier and Carver (1985) argue that optimists have a positive attitude towards a variety of issues, while maintaining positive expectations that are not confined to a specific domain or category of regulation but in reality determine that a positive outcome will be achieved through a "possible effort". Therefore they propose a model similar to Snyder's, which proposes a concept of hope including a cognitive set and not necessarily concrete results. Luthans considering Seligman's notion of optimism claims that optimism includes expectancies formed from exogenous factors and not by the self. On the other hand hope refers to the self (Luthans, 2002b).

According to Luthans & Jensen, (2002) and Youssef et al. (2007) Snyder"s model of Hope actually is consisted of "willpower" defined as determination to achieve goal. There is also one more parameter the "waypower" defined as the ability to create alternative ways instead of that possibly have been blocked during pursuing the goals that have been set. In this context hope seems to be applicable in everyday life thus including the workplace. It is worth to note that according to Luthans hope has been a major variable in studying Positive Organizational Behavior which emphasizes in application of positive traits, states, and behaviors of employees in organizations (Luthans & Youssef, 2007). According to this model hope is strongly related to traits that appear in the workplace such as performance, job satisfaction, work happiness and organizational commitment with these positive results having been widely discussed. (Adams et al. 2002).

3.2 Describing the Adult Hope Scale

During the previous decades have been developed over 14 scales in order to measure the levels of hope in individuals (Eliott&Olver, 2002 op. cit Weingarten, 2010).Luthans (2002a) argues that a rigorous methodology is difficult to apply, as it is difficult to accumulate valid evidence for interpreting human behavior. In fact, the problems are so great that many scholars, mainly from the physical and mechanical sciences, argue that there can be no precise behavioral science. In fact, humans cannot be controlled (such as in vitro experiments). Human variables such as motivation, bias, expectations, learning, perception, values, are likely to mislead the researcher. This is why according to the diagram (diagram 1) of Edwards et al. (2007) hope, agency and pathways are characterized as latent variables which are a wide family of statistical models used to measure abstract concepts (no observed / latent variables or factors) (Papantoniou, 2017).

In this context Snyder has developed his own method of measuring hope based on the previous 45 items scale established by Harris (1988 op. cit Snyder, 1991)and aimed at creating a psychometric scale. Snyder reduced these items into 12 items including 8 hope items plus 4 filler items (Snyder, 1991) aiming at measuring the determination of each individual in pursuing goals (For the scale see Appendix). His scale is also divided in different time periods:

- Past (item 10)
- Present (items 2 & 12)

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• Future (item 9)

Also the questions of the scale includes two types of questions that can be divided into two brunches referring to the following issues: A) Agency: items, 2, 9, 10, 12 B) Paths: items 1, 4, 6, 8. Apart from them the following items 3, 5, 7, 11 mostly refer to their feelings. Evaluation of each item follows an 8 point scale rating from 1-8 (see Appendix),

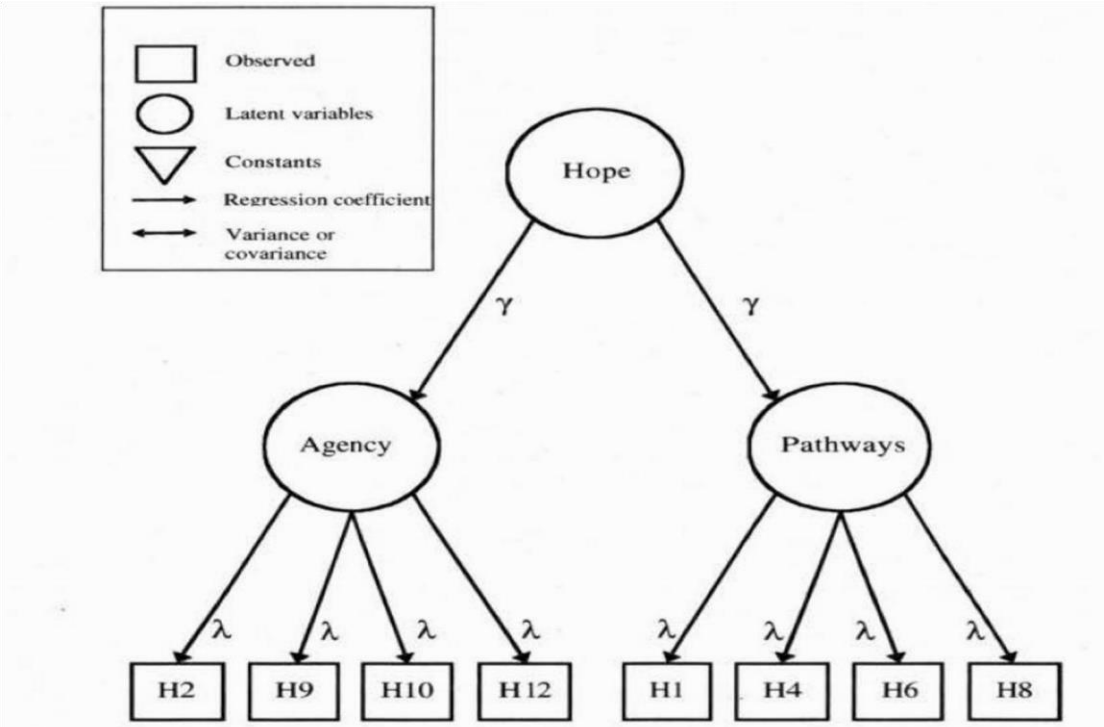

Figure 6.2 Conceptual path diagram of the higher-order factor model of Snyder's Hope Scale. λ = loading of scale item onto latent variable; γ = loading of latent variable onto a higher order latent variable.

Diagram 1: Snyder Adult Hope Scale analysis by Edwards et al. (2007)

4. Applying Adult Hope Scale in a healthcare unit in Athens, Greece

The training program was applied in a private hospital in Athens Greece and was entitled "Customer Care" aiming at enhancing participants' skills such as hope, communication and managing difficult situations and lasted 6 hours, while being implemented in a teaching day in the hospital facilities.

4.1 Aim of the research- Hypotheses

The main purpose of the research is to determine whetheran intervention program (otherwise incompany training or corporate training)can help to improve the hope levels of employees evaluated using the Snyder Hope Scale. In-company training is defined as a method of improving the skills of business personnel in order to achieve the

best results in their activities (Cameron et al. 1987; Jackson & Schuler, 2003). According to Bourantas (2005), the institution of in-company training, but also in-person training in business, has undoubted benefits, as it helps to increase productivity, raise morale, while at the same time promoting employee initiatives. In this way, the business becomes more attractive as an employer, with employees more engaged there.It is also in line with the Social Learning Theory developed by Bandura that it is possible to train even in areas such as behavior and with learners to be able to practice these skills with appropriate reinforcement, but also to apply them in their work (Taylor et al. 2005).

Intheliteraturehasbeen raiseda wide discussionaboutBehavioralSkills (BS)whichare defined as interpersonal and self-regulatory behaviors, which are linked to positive performance in education and the workplace (Elchertetal. 2017). According to (Luthans & Church, 2002) Hope is included in the BS a fact that argues for the study in the present research context.

In the past companies had not emphasized these skills, focusing solely on improving financial indicators. However, executives did not perform well in the BS field, resulting in research indicating the need for further training in these areas. The same mentality was prevalent even in students who did not give due weight to skills such as communication, positive attitude, responsibility, etc. (Rines&Ilies, 2003). In addition, the development of BS in executives should not be considered as 'competing' with hard skills, as their role is actually complementary (Robles, 2012), with employers in many cases seeking to their staff. On the basis of these the following research questions are raised:

- Through quantitative research will be shown whether in-company training through seminars is sufficient to increase employee hope rates

-Through qualitative research to demonstrate the evaluation of the results of the training program by the managers of the hospital.

4.2 Methodology – Sampling& limitations of the research

After the hospital's management accepted the request for implementing the intervention the researcher, in collaboration with agency staff, proceeded to select the sample of participants. Despite the large number of eligible hospital staff in various fields (doctors, nurses, administrative staff)was chosen the method of simple random sampling when the whole population is accessible and the investigators have a list of all subjects in this target population (Elfil&Negida, 2017). Eventually the final sample was n=31.Moreover the difficulties in the availability of the staff did not allow the researcher to set up a control group that would not take part in the experiment in order to compare its results with the experiment group. Also the sample was very small given the large number of hospital staff. In addition, concerning the executives who were asked to evaluate the seminar, there was difficulty in understanding.

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To carry out the research, the Snyder HopeScale - translated into Greek - is distributed for completion, which actually takes the form of a structured questionnaire. It should be noted that the questionnaire is an ideal method for collecting data (Ponto, 2015), so it can help gather information for the needs of the present research. To ensure the reliability and truthfulness of the answers, as well as to ensure that the survey complies with GDPR regulation, anonymity was provided, and each completed questionnaire received a code number (1-31). In order to provide an accurate description of the sample, participants were asked to indicate their gender and age in each questionnaire. Participants were then asked to complete the questionnaires before and after the Training. Their completion took place in the presence of the researcher, with the time given to be 15΄. The researcher even answered clarifying questions. The results were then processed using SPSS software.

For the second part of the research which includes a qualitative research directed to hospital executives (administration, department heads) the non structured questionnaire interview method was used (see Appendix 2), in order to evaluate the training results. A major limitation of the study was the difficulty of specifying the sample as many managers were unavailable due to workload. At the time of the training, there were 15 executives who, however, did not have uninterrupted attendance, as they were sometimes forced to leave the program due to their duties. Thereafter the convenient method of sampling was chosen based on the availability of the managers and as the most feasible in the application. Moreover in spite of the fact that the convenient sample is homogeneous it has not generalizability (Jager et al. 2017) and the conclusions that are drawn are insufficient. The final sample of the qualitative research was n=4. There was also a significant difficulty in communicating with executives. Although the original intention of the researchers was to complete the questionnaires with their presence, this was not possible. Consequently, they were sent by e-mail and after being completed they were sent back to the investigator. Most of the questions included in the questionnaire are closed type so that they can be easier to process

5. Results

The demographic data of the research are the following (Table 1)

TABLE 1: demographic data (sex& ages)

Table 1 (I) SEX

	Frequency	Percent	ValidPercent
MEN	18	58,1	58,1
WOMEN	13	41,9	41,9
Total	31	100,0	100,0

Table 1 (II) AGES

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		Frequency	Percent
Valid	25	1	3,2
	26	1	3,2
	27	1	3,2
	28	1	3,2
	29	1	3,2
	30	1	3,2
	31	1	3,2
	32	1	3,2
	33	1	3,2
	34	1	3,2
	35	1	3,2
	36	2	6,5
	40	1	3,2
	41	2	6,5
	42	1	3,2
	43	3	9,7
	44	1	3,2
	45	1	3,2
	46	2	6,5
	47	1	3,2
	48	2	6,5
	49	1	3,2
	54	1	3,2
	55	1	3,2
	56	1	3,2
	Total	31	100,0

5.1 Agency

TABLE 2 (I) BEFORE TRAINING

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	Q2 I energetically pursue my goals	Q9 My past experiences have prepared me well for my future.	Q10 I‟ve been pretty successful in life.	Q12 I meet the goals that I set for myself.
Mean	6,35	6,10	6,06	5 , 81
Std. Error of Mean	,200	,199	,185	,215
Median	6,00	6,00	6,00	6 , 00
Std. Deviation	1,112	1,106	1,031	1,195
Variance	1,237	1,224	1,062	1,428

TABLE 2 (II) AFTER TRAINING

	Q2 I energetically pursue my goals	Q9 My past experiences have prepared me well for my future.	Q10 I‟ve been pretty successful in life.	Q12 I meet the goals that I set for myself.
Mean	6,77	6,55	6,32	6 , 13
Std. Error of Mean	,152	,179	,142	,201
Median	7,00	7,00	6,00	6 , 00
Std. Deviation	,845	,995	,791	1,118
Variance	,714	,989	,626	1,249

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As it can be seen from Table 2, the measurements obtained from the respondents' answers regarding the agency sector show that there is a slight improvement in the average score they give in each question (6,35 6,106,06 5,81 - 6,776,556,32 6,13 in accordance) in their answers which obviously means that the seminar had a beneficial effect on them. Moreover in Table 2 (II) is shown that standard deviation is shorter than in Table 2 (I) which may mean the potential convergence of participants' views around hope. The discussion that took place between them during the seminar also contributed to this result

However, the slight improvement observed is not clear whether it may be permanent and especially if it is limited only to the presence of the participants in the seminar. Possibly returning to their working duties may have weaken even this improvement. Even the short duration of the seminar is obviously very difficult to have permanent results. Therefore, the creation of long-term seminars is required, and in addition the application of the scale even over many periods of time to the present seminar.

5.2 Path

TABLE 3 (I) BEFORE TRAINING

	Q1 I can think of many ways to get out of a jam.	**Q4** There are lots of ways around any problem.	**Q6** I can think of many ways to get the things in life that are important to me	**Q8** Even when others get discouraged, I know I can find a way to solve the problem.

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Mean	5,84	6,32 ,188	5,77	6 , 19
Std. Error of Mean	,161	7,00 1,045 1,092	,240	,23 8
Median	6,00		6,00	6 , 00
Std. Deviation	,898		1,334	1,327
Variance	,806		1,781	1,761

TABLE 3 (II) AFTER TRAINING

	Q1 I can think of many ways to get out of a jam.	**Q4** There are lots of ways around any problem.	**Q6** I can think of many ways to get the things in life that are important to me.	**Q8** Even when others get discouraged, I know I can find a way to solve the problem.
Mean	6,55	7,03	6,13	6 , 58
Std. Error of Mean	,130	,150	,216	,172
Median	7,00	7,00	6,00	7 , 00
Std. Deviation	,723	,836	1,204	,958
Variance	,523	,699	1,449	,918

In this case there is a slight improvement, which is evident from the increase in scale levels in the questions. It seems that the seminar has helped the participants to think that it is possible to find alternative ways to achieve their goals (Mean: 5,84 6,32 5,77 6,19 -6,55 7,03 6,13 6,58 in accordance). And yet it is not clear whether the seminar really has a long-term impact.

Moreover it seems that the seminar has helped the participant improve slightly their emotional state (Table 4)

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TABLE 4 (I) BEFORE TRAINING

	Q3 I feel tired most of the time.	**Q5** I am easily downed in an argument.	**Q7** I worry about my health	**Q11** I usually find myself worrying about something.
Mean	4,68	5,10	5,06	6,00
Std. Error of Mean	,411	,332	,404	,222
Median	6,00	6,00	6,00	6,00
Std. Deviation	2,286	1,850	2,250	1,238
Variance	5,226	3,424	5,062	1,533

TABLE 4 (II) AFTER TRAINING

	Q3 I feel tired most of the time.	**Q5** I am easily downed in an argument.	**Q7** I worry about my health.	**Q11** I usually find myself worrying about something.
Mean	4,90	5,35	5,81	6 , 23
Std. Error of Mean	,369	,313	,408	,253
Median	6,00	6,00	6,00	6 , 00
Std. Deviation	2,055	1,743	2,272	1,407
Variance	4,224	3,037	5,161	1,981

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On the questionnaires distributed to the executives, it is observed that the majority of them expressed favorable attitude towards the use of the training program for the improvement of the employees (Table 5) as well as the expectancies of the majority about the program came true but not to such an extent that they can be considered enthusiastic (Table 6).

TABLE 5

Do you think that the training program contributes to the improvement of employees?

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	YES	3	75,0	75,0	75,0
	NO	1	25,0	25,0	100,0
	Total	4	100,0	100,0	

TABLE 6

Did your expectations of education come true (choose a grade from 1 (low) -10 (high)?

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	4	1	25,0	25,0	25 , 0
	6	1	25,0	25,0	50 , 0
	8	2	50,0	50,0	100,0
	Total	4	100,0	100,0	

Moreover what should be noted is that the majority of the participants ¾ admitted that the perception of hope was improved (Table 7) while their most favorite part of the program was “Emotions and difficult customers management” (Table 8). This fact may indicate that even senior executives may need to be trained in handlingemotional issues

TABLE 7

Has the training program helped you improve your perceptions of hope?

	Frequency	Percent	ValidPercent	CumulativePercent

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Valid YES	3	75,0	75,0	75,0
NO	1	25,0	25,0	100,0
Total	4	100,0	100,0	

TABLE 8

Which part of the training was the most interesting?

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Theoretical training in customer care	1	25,0	25,0	25 , 0
	Emotions and difficult client management	3	75,0	75,0	100,0
	Total	4	100,0	100,0	

On the other hand the fact that the part of self-assessment was considered by the majority of the sample as not helpful may show that self-evaluation of officials may not have been implemented with the correct modality and objective criteria (Table 9).

TABLE 9

Which parts of the training didn't you find helpful

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Self-assessment	3	75,0	75,0	75 , 0
	Emotions and difficult client management	1	25,0	25,0	100,0
	Total	4	100,0	100,0	

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In the question about the impact of training program in handling everyday life the answers were shared which shows that a better planning may have better results (Table 10).

Table 10

Do you think that the training program has helped you to manage your day-to-day life?

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	YES	2	50,0	50,0	50 , 0
	NO	2	50,0	50,0	100,0
	Total	4	100,0	100,0	

Taking into account that there was not admitted by the 50% of the sample any change in their attitude (Table 12) while there was not observed any alteration in their well-being (Table 11) means that such training programs should also be established for managers or decision makers of companies.

How would you rate your well-being during this period? 1 (low) -10 (high)

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	2	1	25,0	25,0	25 , 0
	3	1	25,0	25,0	50 , 0
	7	2	50,0	50,0	100,0
	Total	4	100,0	100,0	

Table 11

Are there any attitudes / behaviors that changed after attending training?

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	improvement of my attitude towards customers	1	25,0	25,0	25 , 0
	NO	2	50,0	50,0	75 , 0
	self-perception	1	25,0	25,0	100,0
	Total	4	100,0	100,0	

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What is of a particular interest is the fact that ¾ managers answered that their well-being as well their perception of hope could be enhanced through mentoring and coaching training programs while ¼ answered that training programs should have a longer duration (Table 12). In the literature has been supported the view that conducting training programs has a beneficial effect not only in the performance of the employees but also in their psychological state.

TABLE 12

What else would you think will help you improve your well-being and hope at work?

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Mentoring	1	25,0	25,0	25 , 0
	Coaching	2	50,0	50,0	75 , 0
	Longer duration of the program	1	25,0	25,0	100,0
	Total	4	100,0	100,0	

6. Discussion –future research

The above results show that the design of corporate training programs (in this case in the field of healthcare) is likely to have positive effects on improving participants' feelings of hope. In the present study, although it was found that the results were positive in the case of a private hospital in Athens, there are various fields where a future research may contribute. In particular it was not possible to determine whether the improvement of hope levels of the participant following the intervention are are permanent due to the unavailability of staff to carry out a follow up research. Snyder scale should also be examined on a larger sample, mostly on healthcare workers and using a more representative sample as well as a control group and possibly a follow up measurement (after 1 or 3 months) in order to check whether the results of the intervention are permanent . In addition, the design of the program should include a more representative number of executives in order to evaluate its effects.

In the literature has been supported the view that conducting training programs has a beneficial effect not only in the performance of the employees but also in their psychological state (Bozer& Jones, 2018). In this case, a future research could study the impact of different coaching and mentoring methods not only on improving hope rates for employees and executives, but also on the impact on improving other behavioral skills.

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