THE RELATIONSHIP OF COACHING SESSIONS ATTENDANCE WITH PERSONAL GROWTH AND GENERAL SELF-EFFICACY IN GREEK HIGH SCHOOL STUDENTS: EMPIRICAL SECTION

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Abstract: *Coaching is a social phenomenon which transcends the boundaries of a particular profession. Coaching teaches individuals new ways of thinking and how to learn. One of the basic principles of the coaching procedure is self-directed learning. Coaching is dominant in Western culture nowadays since people have recognized that it is a modern need, a prerequisite for their personal and social growth in their lives. Coaching started as Organizational Coaching, as a service offered in organizations. However, it was established as a practice years later, in the 1980s, taking various forms in Education as well. To date, very little empirical research exists on educational coaching for students in High schools, both in Greece and worldwide. Previous studies have used population samples of people of different ages and mainly adult community samples, for example students in higher education and institutions. While hundreds of higher education institutions have implemented coaching programs to help with student success, few coaching programs have been introduced in high schools. Furthermore, most of the literature about coaching at schools shows that coaching for educators has been studied extensively, while the influence coaching can have on students has been underestimated. The main goal of this specific research is to investigate the hypothesis that coaching intervention for final year/secondary high school students impacts their self-efficacy and personal growth positively. It utilizes a quantitative repeated-measures quasi-experimental design with the use of a questionnaire.*

Keywords: *coaching, self-efficacy, personal growth, high-school students.*

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Introduction

The main variables of the study include participation in coaching sessions as an independent variable, and the general self-efficacy and personal growth initiative dimensions as dependent variables. Participants, public high-school students, completed the questionnaires at the outset; they took part in ten (10) coaching sessions with five (5) trained professionals; and completed the questionnaires again. Descriptive statistics were recorded for demographic characteristics (gender, age, parents' marital status, and living arrangements), self-efficacy items and personal growth initiative items, with frequencies and percentages as well as with mean scores and standard deviations as appropriate. The internal consistency of the self-efficacy and personal growth scales was measured with the use of Cronbach's alpha reliability coefficient, and normality was assessed through Kolmogorov-Smirnov test which is appropriate for samples larger than 50 participants. The two dimensions were calculated and descriptive statistics were provided. Finally, the scores of self-efficacy and of personal growth were compared pre- and post-coaching sessions, with the use of the non-parametric related-samples Wilcoxon signed-rank test (the equivalent of the parametric paired samples t-test). Results show that participation in the coaching sessions significantly increased the self-reported personal growth and self-efficacy of the students.

1. Participants

Participants were 70 Greek high-school students in all three grades at the Lyceum level – equivalent to the 10th, 11th and 12th high-school grade levels of the United States. All students were studying in public high-schools. Sampling was opportunity based, given constraints in resources and was based on public high-schools in Central Athens (Creswell, 2014). Inclusion criteria were that participants needed to be Lyceum students, approximately equally represented across the two genders. Exclusion criteria were that participants should not have a diagnosis of a neurological, a developmental or a psychological disorder, as well as that they had not failed/repeated high-school classes.

2. Material

The study used a questionnaire which is comprised of three parts. The first section of the questionnaire collects demographic information of the participants, including gender, age, parents' family status and students' living arrangements. Age

was measured as a continuous variable, with participants writing down the number of their age; the remaining three demographic variables were categorical.

The second section of the questionnaire is the General Self-Efficacy Scale (GSE), by Schwarzer and Jerusalem (1995), translated into Greek by Glynou, Jerusalem and Schwarzer (1992). It is comprised of ten (10) items which assess the level of participant general self-efficacy, measured on a four-point Likert type scale, where 1 = "Not at all true", 2 = "Hardly true", 3 = "Moderately true", and 4 = "Exactly true". The questionnaire items have been found to have and acceptable high Cronbach reliability ranging from 0.76 to 0.90 (Gardner & Pierce, 1998, Luszczynska, Scholz, & Schwarzer, 2005, Schaubroeck & Merritt, 1997, Smith & Foti, 1998). The items extract a single dimension of self-efficacy, by summing up the scores of all ten items. Dimension scores range from 10 to 40, with higher scores indicating the existence of higher self-efficacy.

The third section includes the Personal Growth Initiative Scale II (PGIS-II) by Robitschek et al. (2012). It is comprised of 16 items that are measured on a six-point Likert-type scale, where 0 = "disagree strongly", 1 = "disagree somewhat", 2 = "disagree a little", 3 = "agree a little", 4 = "agree somewhat", and 5 = "agree strongly". The PGIS-II questionnaire was translated by the author and was pilot-tested with a small group of four individuals, three university students and one high-school teacher, who read the items and provided feedback regarding presentation, grammar/syntax and comprehension. Their comments were taken into consideration for the final translation of the questionnaire.

The PGIS-II scale extracts a total dimension of personal growth initiative, calculated as the mean of the individual 16 item scores. Cronbach reliability for the overall dimension of personal growth initiative has been found to be high and acceptable ranging from 0.89 to 0.90 (Robitschek et al., 2012, Yalcin & Malkoc, 2013).

3. Results

3.1. Demographic Characteristics

The sample was comprised of N = 70 participants with a mean age of 16.4 years (standard deviation SD = 1.169 years), with ages ranging from 15 to 19 years old. The marginal majority were female (51%), with 49% males. Students were equally distributed between the 10th (34%), 11th (33%) and 12th grades of high school (33%). Most students' parents were married of living together (73%), with 23% being divorced and 4% being widowed. The majority of students lived with both their parents (71%), with 24% living only with their mother and 4% living only with their father. (Table 1).

Table 1. Demographic Characteristics Results

		Frequency	Percent
Gender	Female	36	51.4
	Male	34	48.6
	Total	70	100.0
Grade	10th	24	34.3
	11th	23	32.9
	12th	23	32.9
	Total	70	100.0
Parents' Marital Status	Married/Living together	51	72.9
	Divorced/Separated	16	22.9
	Widowed	3	4.3
	Total	70	100.0
Living Arrangements	I live with both my parents	50	71.4
	I live only with my mother	17	24.3
	I live only with my father	3	4.3
	Total	70	100.0

3.2. General Self-Efficacy

As to the students' self-efficacy, the following were found. On average, students replied that all items were moderately true, both before and after participating in the coaching sessions.

Specifically, they answered that it was moderately true that they could always manage to solve difficult problems if they tried hard enough; that if someone opposed them they could find the means and ways to get what they wanted; that it was easy for them to stick to their aims and accomplish their goals; that they were confident that they could deal efficiently with unexpected events; and that thanks to their resourcefulness they knew how to handle unforeseen situations.

Students also agreed that they could solve most problems if they invested the necessary effort; that they could remain calm when facing difficulties because they could rely on their coping abilities; that when they were confronted with a problem they could usually find several solutions; that if they were in trouble they could usually think of a solution; as well as that they could usually handle whatever came their way. All scores for the individual items were slightly higher after they participated in the coaching sessions (Table 2).

Table 2. General Self-Efficacy Results

	Before Coaching		After Coaching	
	Mean	SD	Mean	SD
1. I can always manage to solve difficult problems if I try hard enough	2.97	.722	3.14	.666
2. If someone opposes me, I can find the means and ways to get what I want	2.79	.700	2.93	.666
3. It is easy for me to stick to my aims and accomplish my goals	2.69	.843	2.90	.684
4. I am confident that I could deal efficiently with unexpected events	2.97	.780	3.06	.679
5. Thanks to my resourcefulness, I know how to handle unforeseen situations	2.96	.647	3.04	.600
6. I can solve most problems if I invest the necessary effort	2.97	.780	3.07	.709
7. I can remain calm when facing difficulties because I can rely on my coping abilities	2.83	.742	2.97	.659
8. When I am confronted with a problem, I can usually find several solutions	2.83	.589	2.89	.603
9. If I am in trouble, I can usually think of a solution	2.93	.767	3.04	.711
10. I can usually handle whatever comes my way	3.04	.669	3.19	.644

3.3. Personal Growth

Concerning the students' personal growth, the following were found. Overall, participants "agreed a little" or "agreed somewhat" to all 16 items.

Specifically, the students agreed that they set realistic goals for what they wanted to change about themselves; that they could tell when they were ready to make specific changes in themselves; that they knew how to make a realistic plan in order to change themselves; that they took every opportunity to grow as it came up; that when they tried to change themselves, they made a realistic plan for their personal growth; and that they asked for help when they tried to change themselves.

Additionally, the students agreed a little that they actively worked to improve themselves; that they figured out what they needed to change about themselves; that they were constantly trying to grow as a person; that they knew how to set realistic goals to make changes in themselves; that they knew when they needed to make a specific change in themselves; and that they used resources when they

tried to grow. Finally, the students also agreed that they knew steps they could take to make intentional changes in themselves; that they actively sought out help when they tried to change themselves; that they looked for opportunities to grow as a person; and that they knew when it was time to change specific things about themselves. The students had higher scores in all individual items after they participated in the coaching sessions (Table 3).

Table 3. Personal Growth Results

	Before Coaching		After Coaching	
	Mean	SD	Mean	SD
1. I set realistic goals for what I want to change about myself	3.43	.861	3.60	.750
2. I can tell when I am ready to make specific changes in myself	3.36	.660	3.49	.583
3. I know how to make a realistic plan in order to change myself	3.04	.788	3.26	.774
4. I take every opportunity to grow as it comes up	3.27	.721	3.37	.705
5. When I try to change myself, I make a realistic plan for my personal growth	3.13	.883	3.36	.799
6. I ask for help when I try to change myself	3.26	.674	3.41	.577
7. I actively work to improve myself	3.39	.839	3.50	.737
8. I figure out what I need to change about myself	3.13	.588	3.27	.658
9. I am constantly trying to grow as a person	3.37	.802	3.54	.755
10. I know how to set realistic goals to make changes in myself	3.36	.566	3.47	.531
11. I know when I need to make a specific change in myself	3.17	.680	3.24	.669
12. I use resources when I try to grow	3.13	.797	3.27	.797
13. I know steps I can take to make intentional changes in myself	3.09	.654	3.23	.705
14. I actively seek out help when I try to change myself	2.87	.833	3.01	.789
15. I look for opportunities to grow as a person	3.13	.721	3.29	.725
16. I know when it's time to change specific things about myself	3.10	.617	3.27	.612

Conclusions

The present study has examined the effect of attendance to coaching sessions on personal growth and general self-efficacy in 70 Greek 10th-12th grade high school students with a mean age of 16.4 years. In a repeated-measures quasi-experimental design, students completed self-efficacy and personal growth psychometric instruments prior to and after attending ten coaching sessions with experienced coaching professionals. Results showed that all scores for individual personal growth and self-efficacy items were higher after participation in the coaching sessions. For example, in the self-efficacy items, participants moderately agreed that they could solve difficult problems if they tried hard enough, that it was moderately easy to stick to their aims and accomplish their goals, and that they could deal efficiently with unexpected events. In the personal growth items, participating high school students moderately agreed, for example, that they set realistic goals concerning what they want to change about themselves, that they know how to make a realistic plan for personal change, that they know what steps to take in order to make intentional changes in themselves, and that they look for opportunities that will help them to grow as individuals.

The scales showed high internal consistency and the resulting dimensions indicated a moderate level of self-efficacy and of personal growth, with all post-coaching scores being higher compared to the pre-coaching scores. In fact, participation to the coaching sessions led students to report statistically significantly higher scores in both their self-efficacy and their personal growth.

The literature review performed revealed that few, if any, studies have examined the effects of coaching on self-efficacy and personal growth in high school students, and no studies have examined these effects in students in Greece. The results of the present study are in agreement with research in organizational, business settings; for example, a study by Moen and Allgood (2009) with 144 CEOs and mid-level managers found that a leadership coaching program has a positive effect on self-efficacy. Furthermore, Evers et al. (2006) also found that a coaching program for executives improved self-efficacy. Other research with adults has demonstrated that participation in coaching programs improves well-being, hopefulness, and the attainment of goals (Green et al., 2006), while Spence and Grant (2007) also found that coaching participation increased the ability of adults to commit to and attain goals.

In high school students, Green et al. (2007) found that, in 56 female senior high school students, coaching participation significantly improved hopefulness and the ability to tackle stress, and Passmore and Brown (2009) concluded that high school students improved their performance in exams with the aid of coaching. Sezer (2016) examined the effects of educational coaching on 30 high school graduates, and found that coaching participation had a positive effect on students' motivation and ability to tackle stress in class.

However, no studies were found that examine the relationship of coaching participation on personal growth and self-efficacy in combination, and no such studies were found in Greece. More research is needed in this area in order to assess the effect that coaching can have in the personal growth and self-efficacy of Greek high school students.

The present study had some limitations. Specifically, the research was quasi-experimental and did not employ a random sampling technique, while the sample size was modest with 70 participants. Therefore, results could not be generalized to the greater population of high school students in Greece. Another limitation of the study was that participants completed the same questionnaire twice, pre- and post-participation to five coaching sessions. Because of this, it is possible that may have become familiarized with the questionnaire, learned it, and this may have affected their responses.

Given the scarcity of research observed earlier, more research is recommended to be conducted on the relationship between coaching participation and levels of personal growth and self-efficacy in high school students, in order to gather more data and reach a better understanding of the levels of self-efficacy and personal growth, as well as of the effect of coaching on those factors in Greek students.

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