social sciences

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Active Empathic Listening Scale (AELS): Reliability and Validity in a Nationwide Sample of Greek Educators

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Received: 4 July 2017; Accepted: 22 September 2017; Published: 26 September 2017

Abstract: The presented study examined the Active Empathic Listening Scale's (AELS) validity and reliability in a sample of 3955 Greek educators of all teaching levels and specialties. The sample was randomly split and an exploratory factor analysis (EFA) was conducted in the even subsample to evaluate the scale's construct validity. A confirmatory factor analysis (CFA) was performed in the odd subsample to confirm the three-factor model identified by the EFA. The chi square test (χ^2) of the model was significant ($p < 0.05$), due to the large sample size. The root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the goodness of fit index (GFI) values were 0.080, 0.971, and 0.962, respectively, further supporting the fit of the three-factor model. Cronbach's alpha coefficient was used to test internal consistency reliability and was satisfactory exceeding 0.76 for AELS' subscales. The intercorrelations of the three subscales were all positive and significant ($p < 0.001$), ranging from 0.46 to 0.54. Student's *t*-tests and the computation of effect sizes showed that women, principals, and those who had received training in mental health promotion scored higher on all three subscales. Age and years of teaching experience were also positively correlated with most of the AELS' subscales, but the correlations were very low. The analyses confirmed the three-factor model of AELS and demonstrated its validity and reliability in measuring Greek teachers' active listening attitudes.

Keywords: active listening; Active Empathic Listening Scale (AELS); teachers/educators; reliability; validity; Greek sample

1. Introduction

Listening is an essential and indispensable condition for good communication among individuals (Adams and Cox 2010; Bodie et al. 2008). Within interpersonal relationships listening is rendered more successful when conducted actively and empathically (Bodie 2011a; Gearhart and Bodie 2011; Lewis and Reinsch 1998; Robertson 2005; Bodie et al. 2012). Active listening was incepted in Carl Roger's humanistic theory (Rogers 1957) and has since been described as the development of a clear understanding of the speaker's concern followed by the clear communication of the listener's interest in the speaker's message (McNaughton et al. 2008). It has also been described

as a process which includes techniques such as maintaining eye contact, not interrupting the speaker, making encouraging comments or non-verbal gestures, formulating appropriate questions, paraphrasing, and summarizing in order to show full understanding of the things said (Robertson 2005; McNaughton et al. 2008; Gordon and Burch 2003; Weger et al. 2010). If practiced without empathy, though, and if used just as a set of techniques, it may seem empty and inauthentic (Rogers and Farson 1979). Active listening was originally researched in studies investigating counselors' techniques (Rogers and Farson 1979; Meier and Davis 1993; Egan 1998; Levitt 2002). Subsequently, it was investigated in other health-related professions offering support and assistance (Brown et al. 2002; Gilbert 2004; Edwards et al. 2006; Fassaert et al. 2007; Boudreau et al. 2009; Santos and Torres 2012; Wloszczak-Szubzda and Jarosz 2012), as well as in the sales and corporate sectors (Kubota et al. 2004; Rautalinko and Lisper 2004; Flynn et al. 2008; Nishiuchi et al. 2007; Ramsey and Sohi 1997; Kubota et al. 1997). As a result, there have been studies which have focused on the development of scales assessing active listening mainly in management (e.g., Mishima et al. 2000) and medical services (e.g., Fassaert et al. 2007) contexts. Regarding the educational field, there have been studies which have focused on investigating students' listening skills (Fedesco 2015; Jalongo 1995, 2010) given the fact that listening and paying attention are required from their part for the learning process. Teachers' active listening skills have also been researched, mainly regarding their communication with students (Rost 2013; Schultz 2003) and parents (McNaughton et al. 2008; Lasky 2000). However, there seems to be limited relevant research up to date in Greece and only one active listening measure validated for use in Greek educators (Kourmousi et al. 2017a).

Active empathetic listening is a concept initially created in the context of product sales describing "a form of listening practiced by salespeople in which traditional active listening is combined with empathy to achieve a higher form of listening" (Drollinger et al. 2006, p. 162). Drollinger and colleagues (Drollinger et al. 2006) described active empathetic listening as a procedure that includes three stages: (a) *sensing*, which refers to a listener attending to all of the explicit and implicit information expressed by the other person; (b) *processing*, which consists of synthesizing and remembering information in order to enable the construction of a narrative whole; and (c) *responding*, which involves clarification and use of verbal and nonverbal means to indicate attention. Active empathetic listening was first researched with the Active Empathetic Listening measure (AEL), which was created for use in the sales area by Drollinger and colleagues (Drollinger et al. 2006) and was later adapted by Bodie for use in more general conversational settings and named Active Empathic Listening Scale (AELS) (Bodie 2011b). Both Drollinger et al. (2006) and Bodie (2011b; Bodie et al. 2013) presented findings that detailed a consistent and coherent factor structure for the AEL and AELS measures respectively, and provided initial evidence of convergent validity for the aforementioned scales by demonstrating that active empathic listening is related to general levels of conversational activity and self-report empathy. Self-report AELS has been shown to be invariant across time (Bodie et al. 2013) and associated with social skills important to the decoding of relational information (Gearhart and Bodie 2011). It has been used in the investigation of the role of personality and trait emotional intelligence in the active-empathic listening process (Pence and Vickery 2012), in the examination of the role of biological sex in the relationship between personality and active-empathic listening (Pence and James 2015), and in the research of relations among mental representations of conversations and reported tendencies towards active-empathic listening in college students (Vickery et al. 2015). However, besides sex, personality, and emotional intelligence, the impact of other factors such as age, job administrative position and training differences in the ability to actively empathically listen has not been researched. The presented study aims to translate AELS (Bodie 2011b) and investigate its reliability and validity in Greek educators providing further evidence for this scale as an active empathic listening self-report measure, since no relevant research has been conducted in the specific population to date. More specifically, the aim of the presented study is to examine internal consistency reliability and construct validity of the Greek translation of AELS. Our main hypothesis is that the Greek translation of AELS is a reliable and valid self-report instrument for measuring Greek teachers' active empathic listening. Additionally, we also

aim to investigate possible correlations hypothesizing that factors like sex, age, job position and mental health promotion training might affect Greek educators' active empathic listening skills.

2. Materials and Methods

2.1. Participants

A total number of 3995 educators of 43.3 years (SD = 8.9 years) of mean age, 15.5 (SD = 8.4) mean years of teaching experience and 28% of them being men and 72% being women participated in the study. Sample characteristics are presented in Table 1. A small percentage of the participants were school principals (12.9%) and the mean years of holding that position was 7.2 (SD = 5.6). Additionally, 20.6% of the teachers had received training in mental health promotion.

Table 1. Sample characteristics.

	N (%)
Sex	
Men	1108 (28.0)
Women	2847 (72.0)
Age, mean (SD)	43.3 (8.9)
Married	
No	1329 (33.6)
Yes	2626 (66.4)
Children	
No	1317 (33.3)
Yes	2638 (66.7)
Highest degree	
Bachelor	2552 (64.5)
Masters	1216 (30.7)
PhD	187 (4.7)
Years of teaching, mean (SD)	15.5 (8.4)
Number of residents in the area of teaching	
At most 1999	442 (11.2)
2000 to 9999	833 (21.1)
10,000 to 250,000	1916 (48.4)
More than 250,000	764 (19.3)
Type of school	
Public	3344 (84.6)
Private	611 (15.4)
Working status	
Part time	471 (11.9)
Full time	3484 (88.1)
In case of work in public school	
Substitute teacher	437 (13.4)
Permanent teacher	2833 (86.6)
Principle	
No	3443 (87.1)
Yes	512 (12.9)
Years as principle, mean (SD)	7.2 (5.6)
Number of students in class, mean (SD)	18.2 (9.6)
Students in need of special education (diagnosed)	
No	1881 (47.6)
Yes	2074 (52.4)
Students in need of special education (according to educator's opinion)	
No	1174 (29.7)
Yes	2781 (70.3)
Students with difficulties in speaking or apprehension	
No	1431 (36.2)
Yes	2524 (63.8)
If yes, how many, median (IQR)	2 (2–4)
Having received Mental Health Promotion Training	814 (20.6)

2.2. Procedure

The study was conducted during December 2015 and January 2016. Its questionnaire was anonymous and was posted for several days on the Panhellenic School Network (www.sch.gr), namely the official Greek site for schools and educators to which 99.98% of elementary and secondary schools are officially linked, and also on various official sites of teachers' associations (i.e., www.pekade.gr, www.p-e-f.gr, www.inital.gr etc.) and on all the important and most-visited Greek educational sites (i.e., www.specialeducation.gr, www.alfavita.gr, www.esos.gr, www.ipaideia.gr, www.omep.gr etc.). It would appear after following a link titled *"Are you an educator? Would you like to know your level of active listening skills?"*. After having received information on the purpose of the study in the first page, participants were informed that upon completion of the questionnaire they would receive their scores, the mean scorings of previous administrations of the included scales, and general information on active listening and active empathic listening skills.

2.3. Measures

The study questionnaire consisted of a Greek translation of the AELS (Bodie 2011b), a Greek translation of the Active Listening Attitude Scale (ALAS) (Mishima et al. 2000) and items concerning demographic information.

2.3.1. Active Empathic Listening

To assess Greek educators' active empathic listening skills a Greek translation of the AELS was used. The AELS (Bodie 2011b) is a self-report measure which includes 11 items that are scored on a seven-point Likert scale, with response alternatives being 1 = Never or almost never true, 2 = Usually not true, 3 = Sometimes but infrequently true, 4 = Occasionally true, 5 = Often true, 6 = Usually true, and 7 = Always or almost always true. The AELS (Bodie 2011b) produces three subscales: (a) *Sensing* (four items) which refers to a listener receiving both the expressed and the tacit information sent out by the other person (e.g., "I am aware of what others imply but do not say"); (b) *Processing* (three items) which refers to synthesizing and recalling the given information (e.g., "I keep track of points others make"); and (c) *Responding* (four items) which refers to the use of verbal and nonverbal means to clarify and indicate attention (e.g., "I ask questions that show my understanding of others' positions"). Respondents were instructed to choose the answer that best reflected their ordinary style of listening in the workplace (i.e., school).

2.3.2. Active Listening

A Greek translation (Kourmousi et al. 2017a) of the ALAS was also used in the presented study in order to assess teachers' active listening skills. The ALAS (Mishima et al. 2000) includes 31 items which are scored on a four-point Likert scale, with response choices being 0 = Disagree, 1 = Rather Disagree, 2 = Rather Agree, and 3 = Agree. It consists of three subscales: (a) *Listening Attitude* (13 items, reverse scoring) which refers to "empathic understanding" or to "unconditional positive regard" (e.g., "I hurry him/her into talking faster"); (b) *Listening Skill* (11 items) which describes more technical aspects of active listening and secondarily "empathic understanding", "congruence" or the utilization of active listening (e.g., "I pay attention to his/her unexpressed feelings"); and (c) *Conversation Opportunity* (seven items) (e.g., "People feel easy to talk to me") which mainly measures the utilization of active listening.

2.3.3. Demographic Information

Personal data such as age, sex, and marital status were collected as well. Job related data such as the teaching grade, the occupation of an administrative position (being a principal), the years of teaching experience, and the possibility of having received training in mental health promotion, were also investigated.

2.4. Translation

The AELS (Bodie 2011b) was translated into the Greek language, following established translation protocols (Solano-Flores et al. 2009; Van de Vijver and Hambleton 1996). Two professional translators who were fluent in the English language (i.e., source) and were also native speakers of the Greek language (i.e., target) proceeded with independent forward translations into the target language. The preliminary Greek version which was produced was subsequently translated back into the original language by a third professional translator. The two versions—the back-translation and the original scale—were afterwards compared and adjustments were made in case of discrepancies between the two. An expert committee reviewed the developed scale and gave their feedback. In order to examine the adjusted scale items' clarity and comprehension more thoroughly, it was administered to a small group of volunteer teachers for the cognitive debriefing phase of the presented study. After this final process the Greek version of AELS was created.

2.5. Statistical Analysis

Continuous variables are presented with mean and standard deviation (SD). Qualitative variables are presented with absolute and relative frequencies. The sample was randomly split into two datasets of approximately equal size. Data of the even subsample (N = 1973) were used to carry out an exploratory factor analysis in order to evaluate construct validity of the questionnaire. Principal component analysis (PCA) was chosen as extraction method using Varimax rotation. The cut-off point for factor loadings was 0.40 and for eigenvalues it was 1.00. A confirmatory factor analysis (CFA) with maximum likelihood procedure was performed in the odd subsample (N = 1982) in order to confirm the model identified from the EFA. The variance of the latent constructs was fixed at one during parameter estimation. The fit of the CFA model was assessed using the chi square (χ^2), the comparative fit index (CFI), the goodness of fit index (GFI) and the root mean square error of approximation (RMSEA) (Mueller 2000). For the CFI and GFI indices, values close to or greater than 0.95 are taken to reflect a good fit to the data (Hu and Bentler 1999). RMSEA values of less than 0.05 indicate a good fit and values as high as 0.08 indicate a reasonable fit (Hu and Bentler 1999). Additionally, a non-significant chi square statistic indicates a good fit, but chi square is usually sensitive to sample sizes and usually significant for large sample sizes (Mueller 2000). The internal consistency of the questionnaire was analyzed with Cronbach's alpha. Reliability equal to or greater than 0.70 was considered acceptable. Pearson correlations coefficients were used to explore the association among the three AELS subscales and the correlation of AELS with the ALAS subscales. Correlation coefficient between 0.1 and 0.3 were considered low, between 0.31 and 0.5 moderate and those over 0.5 were considered high. The AELS subscales were compared according to sex and principal position using Student's t-tests and the computation of effect sizes. Effect sizes of 0.2–0.5 are considered small, between 0.51–0.81 moderate, and over 0.8 are considered large. Additionally, Pearson correlation coefficients were computed for the association of age and educational experience with the three AELS subscales. p values reported are two-tailed. The statistically significant level was set at 0.05 and analysis was conducted using SPSS and AMOS (SPSS, Chicago, IL, USA) Statistical Software.

3. Results

The study sample consisted of 3995 participants (1108 men and 2847 women) with mean age 43.3 years (SD = 8.9 years). Sample characteristics are presented in Table 1. Descriptive statistics for the AELS items are shown in Table 2. Most of the items had median value equal to 6, with the exception of the items 5, 6, and 9, which had a median equal to 5.

Table 2. Descriptive statistics for the *AELS* items.

	Mean	SD	Median	Percentile 25	Percentile 75
Item 1	5.4	1.1	6	5	6
Item 2	5.6	1.0	6	5	6
Item 3	5.4	0.8	6	5	6
Item 4	5.9	1.0	6	5	7
Item 5	5.3	1.4	5	4	6
Item 6	5.0	1.3	5	4	6
Item 7	5.6	1.1	6	5	6
Item 8	5.6	1.4	6	5	7
Item 9	5.4	1.2	5	5	6
Item 10	5.7	1.0	6	5	6
Item 11	6.1	1.0	6	5	7

A principal components analysis was performed in the even subsample. EFA identified three factors (Figure 1) with a Kaiser Meier Olkin (KMO) coefficient equal to 0.89 and a Barlett χ^2 value equal to 9195.3 ($p < 0.001$), while the proportion of total variance explained was 67.7%.

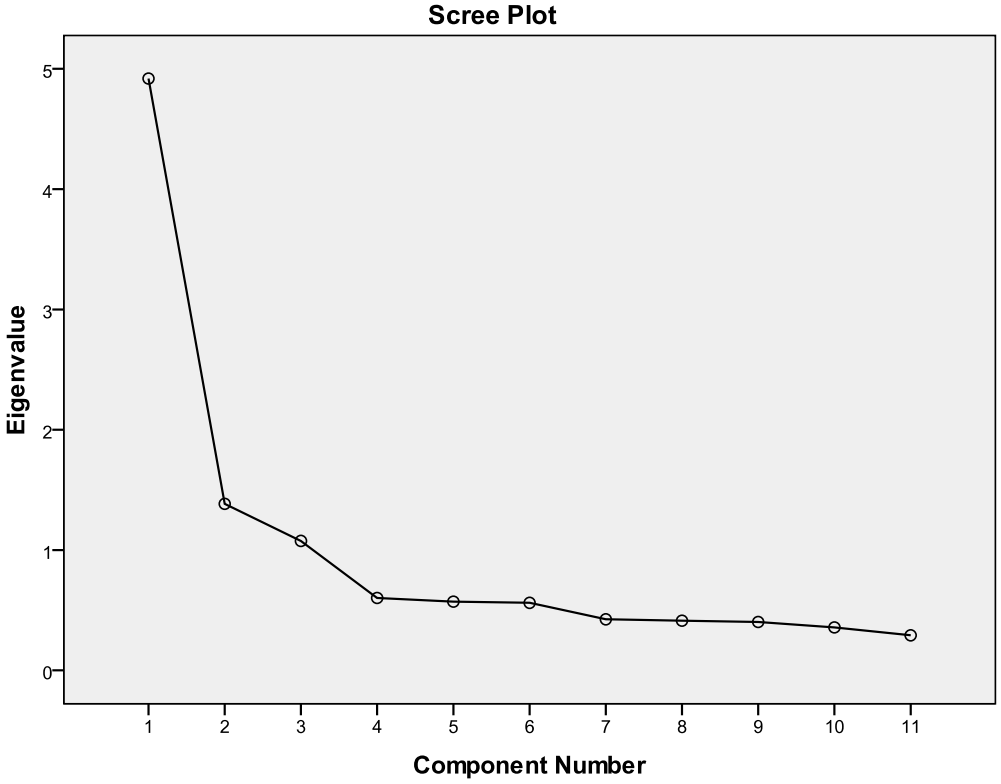

Figure 1. Scree plot from the results of factor analysis for the AEL questionnaire.

All factor loadings were above the criterion of 0.40 and ranged from 0.69 to 0.83 (Table 3). None of the items had secondary loading.

Table 3. Factor loadings form the results of exploratory factor analysis for the AELS questionnaire.

	Sensing	Responding	Processing
I am sensitive to what others are not saying	**0.75**	0.22	0.09
I am aware of what others imply but do not say	**0.83**	0.16	0.16
I understand how others feel	**0.77**	0.14	0.22
I listen for more than just the spoken words	**0.74**	0.19	0.31
I assure others that I will remember what they say	0.15	0.22	**0.77**
I summarize points of agreement and disagreement when appropriate	0.20	0.20	**0.80**
I keep track of points others make	0.30	0.26	**0.69**
I assure others that I am listening by using verbal acknowledgements.	0.13	**0.77**	0.16
I assure others that I am receptive to their ideas	0.14	**0.73**	0.33
I ask questions that show my understanding of others' positions	0.23	**0.74**	0.31
I show others that I am listening by my body language (e.g., head nods)	0.24	**0.83**	0.09
Cumulative % variance explained	24.4	48.4	67.7

Note: Bold indicates factor loadings above the criterion of 0.40.

Corrected item-total correlations and Cronbach's alpha if an item was deleted per factor are presented in Table 4. All corrected item-total correlations were high and internal consistency reliability was accepted with Cronbach's alpha equal to 0.82 for Sensing, 0.76 for Processing, and 0.82 for Responding. Cronbach's alpha for all questionnaire was equal to 0.87.

Table 4. Corrected item-total correlations, internal consistency reliability and means of the AELS factors.

	Corrected Item-Total Correlation	Cronbach's Alpha If Item Deleted	Cronbach's Alpha	Mean (SD)
Sensing				
Item 1	0.60	0.81	0.82	5.6 (0.8)
Item 2	0.72	0.74		
Item 3	0.63	0.79		
Item 4	0.68	0.76		
Processing				
Item 5	0.55	0.73	0.76	5.3 (1.0)
Item 6	0.63	0.62		
Item 7	0.60	0.67		
Responding				
Item 8	0.60	0.81	0.82	5.7 (0.9)
Item 9	0.64	0.77		
Item 10	0.67	0.77		
Item 11	0.70	0.75		

A CFA was conducted in the odd subsample to estimate if the model fitted the data well. The CFA indicated an adequate fit of the three-factor model (RMSEA = 0.080, CFI = 0.971, and GFI = 0.962). None of the item cross loadings exceeded the item loadings on the intended latent construct. The chi-square test of the model was significant as expected ($p < 0.05$).

The intercorrelations of the AELS subscales are shown in Table 5. All subscales were significantly and positively correlated with each other and the correlations were medium to high. Additionally, a significant correlation was found between AELS subscales and all ALAS dimensions (Table 5).

Table 5. Intercorrelations of AELS subscales and correlations with ALAS dimensions.

	Sensing	Processing	Responding
Sensing		0.50	0.46
Processing			0.54
Listening attitude	0.19	0.20	0.17
Listening skill	0.48	0.44	0.42
Conversation opportunity	0.30	0.28	0.22

Note: all correlations are significant at $p < 0.001$.

Association of AELS subscales with sex, age, years of teaching, being a principal, and having received mental health promotion training are presented in Table 6. All subscales had greater values in women as compared to men with low effect sizes and equal to 0.33 for Sensing, 0.08 for Processing, and 0.34 for Responding. Additionally, all subscales had greater values in those being at a principal position with low effect sizes and equal to 0.15 for Sensing, 0.24 for Processing, and 0.08 for Responding. Additionally, all subscales had greater values in those that had received mental health promotion training with effect sizes equal to 0.27 for Sensing, 0.16 for Processing, and 0.24 for Responding. Age and years of teaching were also positively correlated with most of the AELS subscales, but the correlations were very low.

Table 6. Association of AELS subscales with sex, age, years of teaching, and being a principal.

	Sensing		Processing		Responding	
	Mean (SD)	***p***	**Mean (SD)**	***p***	**Mean (SD)**	***p***
Sex						
Men	5.37 (0.86)	<0.001 *	5.23 (1.05)	0.021 *	5.46 (1)	<0.001 *
Women	5.64 (0.78)		5.32 (1)		5.77 (0.89)	
Age, r +	0.05	0.002	0.08	<0.001	0.08	<0.001
Years of teaching, r +	0.06	<0.001	0.10	<0.001	0.02	0.150
Principal						
No	5.55 (0.82)	0.001 *	5.26 (1.02)	<0.001 *	5.68 (0.93)	0.096 *
Yes	5.67 (0.77)		5.5 (0.96)		5.75 (0.96)	
Mental Health Promotion Training						
No	5.52(0.83)	<0.001	5.26(1.02)	<0.001	5.64(0.95)	<0.001
Yes	5.73(0.74)		5.42 (0.97)		5.86(0.87)	

* Student's *t*-test; + Pearson's correlation coefficient.

4. Discussion

The main purpose of the presented study was to successfully translate and examine the psychometric properties of the Greek version of the self-report AELS in a sample of educators of all teaching grades and specialties. The exploratory factor analysis corroborated the three-dimension higher-order construct model by Bodie (Bodie 2011b), explaining 67.7% of total variance. All items' factor loadings were above the set criterion of 0.40 and none of the items had secondary loading suggesting no need to remove any, similarly to the manufacturer's study (Bodie 2011b). The model was also confirmed by the CFA. The RMSEA value was 0.080, whereas the CFI and GFI values were 0.971 and 0.962, respectively. The chi-square test of the model was significant, as was predicted due to our large sample size (Mueller 2000).

Cronbach's alpha for the AELS was equal to 0.87, while the internal consistency reliability of its three dimensions was 0.82 for Sensing, 0.76 for Processing, and 0.82 for Responding, thus higher than the one reported by the original inventory's manufacturer (Bodie 2011b). This can be explained by the fact that reliability is a product of data and not of a scale and, consequently, different study contexts and populations produce different rates (Bodie 2011b).

Additionally, all the AELS dimensions significantly and positively correlated with each other, with correlations being medium to high. A significant correlation was also found between the AELS dimensions and all ALAS subscales, providing further construct validity evidence for the translated AELS version.

Female teachers scored higher on all the AELS dimensions, thus appearing to exhibit better sensing, processing, and responding abilities than their male counterparts. A similar correlation—though only in the Sensing and Responding subscales—was found in a study of Pence and James (2015) concerning the investigation of the role of biological sex in the relationship between personality and active-empathic listening. Also similar was the correlation of the sex with active listening which was found in all the ALAS subscales (Kourmousi et al. 2017a). Although sex differences have not been sufficiently examined concerning the ability to actively empathically listen (Pence and James 2015), women have been reported by most researchers to dispose higher levels of empathy than men (Spreng et al. 2009; Youssef et al. 2014; Toussaint and Webb 2005; Kourmousi et al. 2017b) due to their tendency to be more empathetic, pay closer attention to the speaker and the things said, and listen more effectively (Christov-Moore et al. 2014; Rueckert and Naybar 2008; Rueckert et al. 2011; Thompson and Voyer 2014). However, there are studies which have found no significant differences between males and females in empathy (e.g., Baldner and McGinley 2014). It could be hypothesized that the variant findings reflect the divergence in empathy and in empathic active listening conceptualization, but also the many interpersonal and intrapersonal factors that come into play (Kourmousi et al. 2017b). Active empathic listening may vary as a function of personality differences (Pence and James 2015).

All the AELS subscales also revealed differences concerning job position: principals scored higher than the rest of the educators. The impact of an administrative position in educational settings on active empathic listening had not been researched to date, apart from a similar correlation which was found with the ALAS subscales (Kourmousi et al. 2017a), indicating that both active and active empathic listening could be improved by managing experience in schools.

Mental health promotion training resulted in higher scores on all AELS subscales as well. A similar correlation was found with the ALAS subscales (Kourmousi et al. 2017a). This finding was somewhat expected since active listening is often an important part of mental health promotion training programs (Kaminski et al. 2008; Puura et al. 2002; Ragozzino et al. 2003).

Age and years of teaching experience also showed positive but low correlations with most of the AELS subscales indicating that slight improvements in active empathic listening dimensions, namely Sensing, Processing, and Responding, do occur over the years in Greek educators due to maturity and teaching experience, as it has been shown to happen with empathy (Kourmousi et al. 2017b) and skills, such as problem solving (Kourmousi et al. 2016) and locus of control (Kourmousi et al. 2015).

5. Strengths and Limitations

The main strengths of the presented study are the large sample and the diversity of the participating educators regarding their specialty, the grade they taught, the years of teaching experience and the geographical areas in which they worked. Furthermore, the percentage of the study participants' representation concerning sex, mean age, mean working years, working status, teaching grade, specialty, and geographical region, is identical with the one presented by the Greek Statistical Authority for educators of the 2015–2016 academic year (Greek Statistical Authority 2016). That, together with the facts that (a) all Greek school units are officially linked to the Panhellenic School Network on the site of which our study was posted and (b) all Greek regions were represented accordingly, can characterize our sample as representative. In addition, we were able to confirm the good fit of AELS to a Greek sample. However, in the presented study limitations can also be identified. Given that the design of the study was cross-sectional, we were not able to examine the AELS's sensitivity over time or its test-retest reliability. Another weakness of this study—though a

remote one due to the length of the study questionnaire—is the possibility of participants having completed a questionnaire more than once.

6. Conclusions

The results of the presented study support our main hypothesis that the AELS is a reliable and valid self-report instrument for measuring Greek teachers' active empathic listening; it can be applied to Greek educators' populations since it has good construct validity and internal consistency for evaluating active empathic listening, adding support for its easy utilization not only in the educational community but in the adult population in general. Our other hypotheses that factors such as sex, age, job position, and mental health promotion training of educators would affect their active empathic listening skills were also supported by the study's findings. We hope, however, that additional active empathic listening related research will be conducted in the future in Greece, not only in educators of all teaching grades and specialties, but in more diverse and large populations as well.

Acknowledgments: We would like to thank the Panhellenic School Network which is the official Greek network for schools and educators, as well as the official sites of Greek teachers' associations and the Greek educational sites which hosted our questionnaire. We would also like to thank all the teachers who contributed significantly to our study by taking the time to complete our online questionnaire.

Author Contributions: N.K. conceived, designed and conducted the study, with the help of V.K. K.K., G.T. and V.Y. analyzed the data. N.K., K.M. and A.B. drafted the manuscript, and together with the other authors reviewed its final form.

Conflicts of Interest: The authors declare that they have no competing interest.

If the appendix sections contain a heading then change the argument to "yes". If there is only one appendix section then change the argument to ?one? and no counter is printed (?Appendix?).

Appendix A

Greek Translation of the AELS

Παρακαλείσθε να υποδείξετε πόσο συχνά αισθάνεστε ότι σασ αντιπροσωπεύουν οι παρακάτω προτάσεισ, τικάροντασ την κατάλληλη απάντηση στην επτάβαθμη κλίμακα: Ποτέ η σχεδόν ποτέ(1)–Πολύ Σπάνια (2)–Σπάνια(3)–Μερικέσ φορέσ (4)–Συχνά (5)–Πολύ συχνά (6)–Πάντα ή σχεδόν πάντα (7)

1. Είμαι ευαίσθητοσ/η σε ό,τι οιάλλοι δεν εκφράζουν με λόγια.
2. Έχω επίγνωση αυτού που οι άλλοι υπονοούν αλλά δεν εκφράζουν με λόγια.
3. Κατανοώ το πώσ αισθάνονται οι άλλοι.
4. Έχω τισ αισθήσεισ μου ανοιχτέσ για κάτι περισσότερο από αυτά που λέγονται με λόγια.
5. Διαβεβαιώνω τουσ άλλουσ ότι θα θυμάμαι αυτό που μου λένε.
6. Συνοψίζω τα σημεία συμφωνίασ και διαφωνίασ την κατάλληλη στιγμή.
7. Κρατώ στο νου μου τα θέματα που επισημαίνουν οι άλλοι.
8. Διαβεβαιώνω τουσ άλλουσ ότι τουσ ακούω χρησιμοποιώντασ λεκτικέσ επιβεβαιώσεισ/επιφωνήματα (π.χ.: Μμ, Χμ, κ. λπ.)
9. Διαβεβαιώνω τουσ άλλουσ ότι είμαι δεκτικόσ/η στισ ιδέεσ τουσ.
10. Κάνω ερωτήσεισ που δείχνουν ότι κατανοώ τισ θέσεισ των άλλων.
11. Δείχνω στουσ άλλουσ ότι τουσ ακούω χρησιμοποιώντασ τη γλώσσα του σώματοσ (π.χ. με νεύματα κεφαλήσ).

Note: Permission to use the Greek translation of the AELS is granted for educational purposes only, upon request. Please note that according to AELS' author's instructions (Bodie 2011b) its items should be randomized prior to administration.

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