Special Section: Contemporary challenges in Clinical and Health Psychology
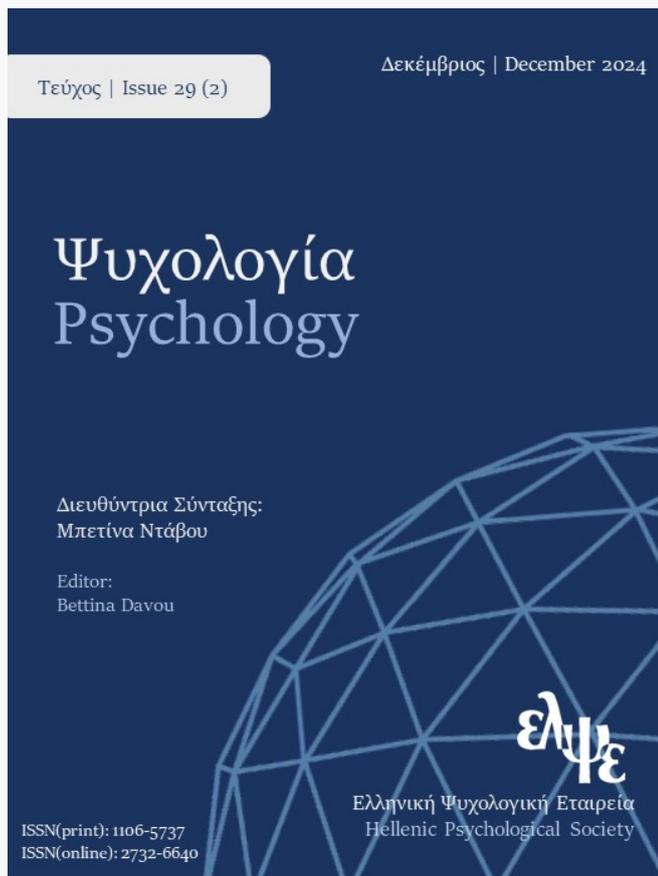
How leaders reach to ethical leadership: An unfolding item response theory analysis

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How leaders reach to ethical leadership: An unfolding item response theory analysis

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| KEYWORDS	ABSTRACT
  CORRESPONDENCE Eirini Marina Mitropoulou DYPA – Public Employment Center, KPA 2 Rethimno, Kriari 7-9, P.C. 74100 e.mitropoulou@dypa.gov.gr; mitropoulou_eirini@yahoo.gr	Ethical leadership (EL) is considered an important determinant of occupational antecedents, and the focus is on understanding its nomonological network. Theory initially suggested that there is an evident graduation in the manifestation of leading with ethics in the workplace, expressed by three different styles of leadership depending on their commitment to ethics: the ethical leader, the ethically-neutral leader, and the hypocritical/fake ethical leader. To date, this proposed graduation, based on the leaders' responses to ethics, has not been empirically tested. In the present study, an item response theory (IRT) model under the ideal point response/unfolding paradigm is used to examine this graduation. Approximately 650 Greek leaders fulfilled the self-report Questionnaire of ethical Leadership (QueL). The results supported that the unfolding IRT model – suggesting graduation in the response processes of individuals - showed a worse fit compared to the non-unfolding model (namely dominant) IRT model; moreover, the item location parameters didn't reveal any cluster of response to the QueL's items. Findings contribute greatly to ethical leadership both theoretically and empirically. From a theoretical perspective, EL is best described as a monotonic linear response construct, which highly depends on the leader's ethical virtues and behaviors and their likelihood of endorsing an ethical leadership item. Ethics is the core determinant for discerning what is right and what is wrong in the workplace. To this end, any difference in ethical leadership manifestation (i.e. ethically neutral leadership behaviors) should be regarded as a distinct construct, refraining from the genuine ethical behaviors and virtues of the leader. From an empirical perspective, implications for training and measurement are also discussed.

Introduction

The concept of ethical leadership has been stimulated by several organizational scandals; research has focused on examining the ethical nomonological network to capture the full spectrum of this phenomenon (e.g., Bedi et al., 2016). Carroll (1987, 2000) was the first to propose three different types of organizational leaders, depending on their commitment to ethics: the moral manager, the amoral manager, and the immoral manager. According to the author, moral managers consider ethics in all aspects of their lives; they constantly make decisions and act in accordance with their ethical standards. Amoral managers do not commit immoral acts, but rather ethical standards are not their top priority during work. Such leaders simply fail to consider ethics in their daily decision-making processes. Finally, immoral managers behave in a purely selfish manner, are profit-driven and very often defy ethical standards in their work environment.

Likewise, Treviňo, Hartman and Brown (2000) also proposed a similar distinction among the practices of ethical leaders based on their qualitative work. Ethical leaders are considered to be both moral people and moral managers. According to the authors, moral people are characterized by integrity, honesty, sincerity, respect, and trustworthiness; they do the right thing in the right way and always make fair decisions at their work. Moral managers are leaders who externalize the ethical virtues they stand for. They communicate ethics regularly with others and consistently reinforce ethical behaviors in their workplace through rewards and punishments. The discrepancies between these two leadership types (moral person and moral manager) reveal different ethical leadership styles. Specifically, leaders who conform to the ethical virtues of the moral person but are weak moral managers are referred to as 'ethically neutral' leaders. Ethically neutral leaders are unaware or insensitive to ethical concerns and more interested in the personal gain; they are less aware of ethical standards and often choose to use their power in negative ways. In contrast, leaders who adhere to the ethical behaviors of the moral manager but are weak as moral persons are considered hypocritical or fake ethical leaders. They adhere to ethical standards at work because they have to and not necessarily because they value ethics. Their concern is to promote an ethical image because it is seen as more helpful to their work despite their true inclination (Treviňo et al., 2003).

Treviňo and colleagues (2000, 2003) were the first to propose that ethical leadership reveals graduations in accordance with the ethical behavior that are expressed in the workplace. According to the authors, ethical leadership is located in the middle of a theoretical continuum that takes the form of a bell-shape curve. According to this notion, the more the leaders conform to their ethical principles and values (thus exhibit both moral leader and moral manager behaviors), the more they are perceived as ethical by others. Conversely, the less leaders behave in accordance with their principles and values, the less they are perceived as ethical by their followers. These styles of ethical leadership, namely, ethically 'neutral' leadership and ethically 'hypocritical/fake' leadership, are located at each tail of the bell curve, since their existence presupposes a deterioration of ethical characteristics and practices. The ethical leadership network proposed by Treviňo et al. (2000, 2003) is shown in Figure 1.

Figure 1. *The ethical leadership continuum proposed by Treviňo et al (2000, 2003)*
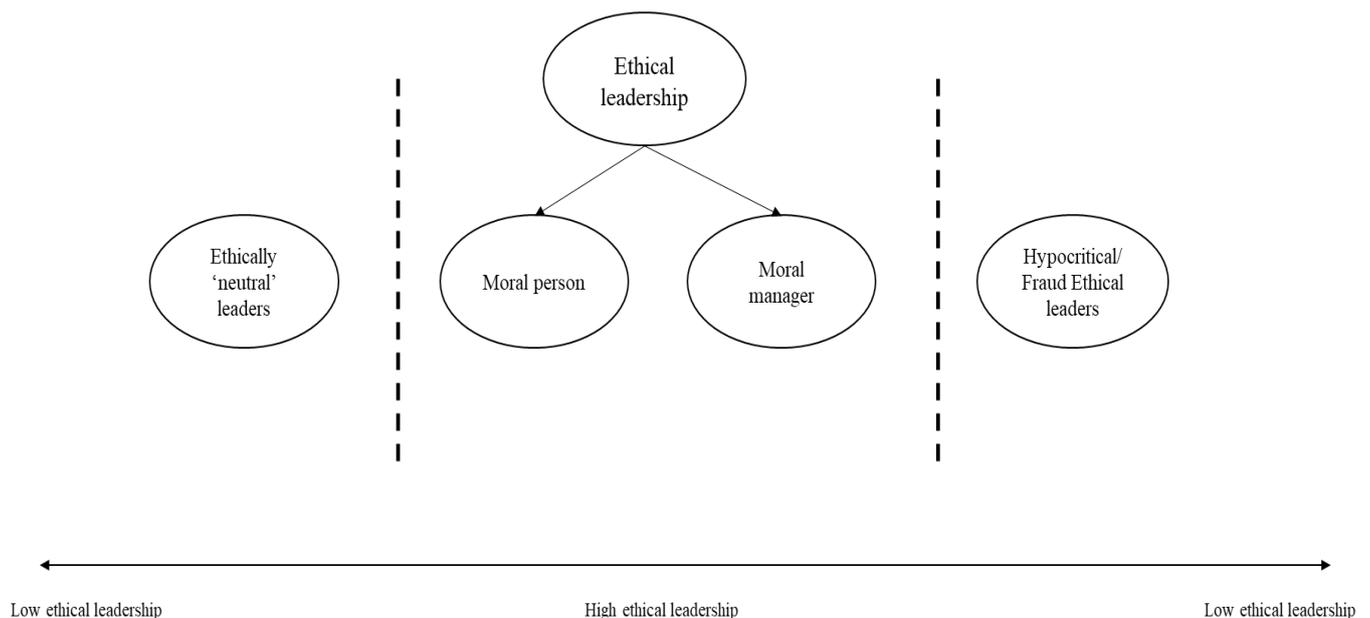
Ethical leadership theory has evolved dramatically since then (e.g., Avey et al., 2012; Bedi et al., 2016; Mitropoulou et al., 2020). Based on the qualitative research of Treviňo et al., (2000, 2003) and Carroll (1987, 2000), Brown, Treviňo and Harrison (2005) defined ethical leadership as '*the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making*' (p.120). According to the authors' definition, the ethical leaders utilize ethical practices and put effort to promote those practices through role-modeling and observational learning. This two-dimensional theoretical framework has drawn research attention and emphasis is given on the understanding of its role in fostering employees' ethical behaviors and attitudes within organizations (e.g., Mitropoulou et al., 2020).

Today, there is a growing body of research supporting the necessity and usefulness of leading with ethics in the workplace (e.g., Ko et al., 2017). For example, ethical leadership is positively associated with constructive workplace behaviors and attitudes, such as increase of followers' voice, psychological well-being, job satisfaction and psychological ownership (e.g., Avey et al., 2012). Moreover, ethical leaders enhances the affective commitment and the emotional stability of their followers, improves their tolerance of work frustration (e.g., Franczukowska et al., 2021) and enhance affective trust and organizational citizenship behaviors (e.g., Newman et al., 2014). In addition, ethical leadership is also negatively related to adverse work behaviors, which may harm the workplace, such as the abusive supervision, followers' turnover intentions and initiation of job search practices (e.g., Palanski et al., 2014). Furthermore, ethical leadership is found to diminish bullying and followers' feelings of workload or burnout (e.g., Mitropoulou et al., 2020; Stouten et al., 2010).

Despite the impact of the ethical leadership in the workplace, to our knowledge, there is no research to empirically challenge these psychological processes or any potential differences in the way ethical leadership is perceived or expressed, depending on the theoretical framework that has originated from. As Treviňo and colleagues (2003, p.11) referenced during their qualitative research:

> "*This part of the interview always came second, because our primary focus was on informants' perceptions of ethical leadership.*"

However, understanding the process that underlies leaders' practices and behaviors may provide a better insight into the nature of ethical leadership itself and ethical conduct in the workplace in general (e.g., Brown &Treviňo, 2006).

Methodological considerations

The importance of ethical leadership in the workplace is undisputed and understanding its nomonological network is considered essential. Nevertheless, there is no empirical research that examines the response processes of ethical leaders and thus the qualitative differentiation proposed by Treviňo et al (2000, 2003). To date, the concept of ethical leadership has been interpreted as a monotonic, linear relationship between the leader's ethical virtues/behaviours and the likelihood of endorsing an ethical leadership item; if an individual has a very high score – the more ethical this individual is perceived. According to item response theory (IRT), this probability is highest when the person's abilities (i.e., ethical attitudes and behaviours) exceed the item's abilities, i.e., when the person's parameters dominate the item's parameters. This relationship is illustrated by the item response curve in Figure 2-a.

In IRT, responses from a test can be modeled by two cognitive processes: the cumulative/dominance process and the unfolding process (e.g., Liu & Chalmers, 2018; Tay & Ng, 2018; Zampetakis, 2011). Although existing questionnaires of ethical leadership have adopted the dominance process (e.g., Brown et al., 2005), their response processes haven't been examined under an unfolding perspective. The unfolding model supports

that the relationship between the person and the item parameters is nonmonotonic. Accordingly, the probability of endorsing an item is highest when the distance between the person and the item's parameters is small, and conversely, the probability of endorsing the item is lowest when the distance between the person and the item's parameters is large. Thus, a person endorses an item that he or she believes is consistent with his or her own value on the latent construct measured. This response pattern differs from the original item response curve and has a reverse U-shaped curve, as shown in Figure 2-b.

Figure 2. *The typically expected item curves for Likert-type items under the dominance (a) and the unfolding (b) IRT models*

(a)   (b)
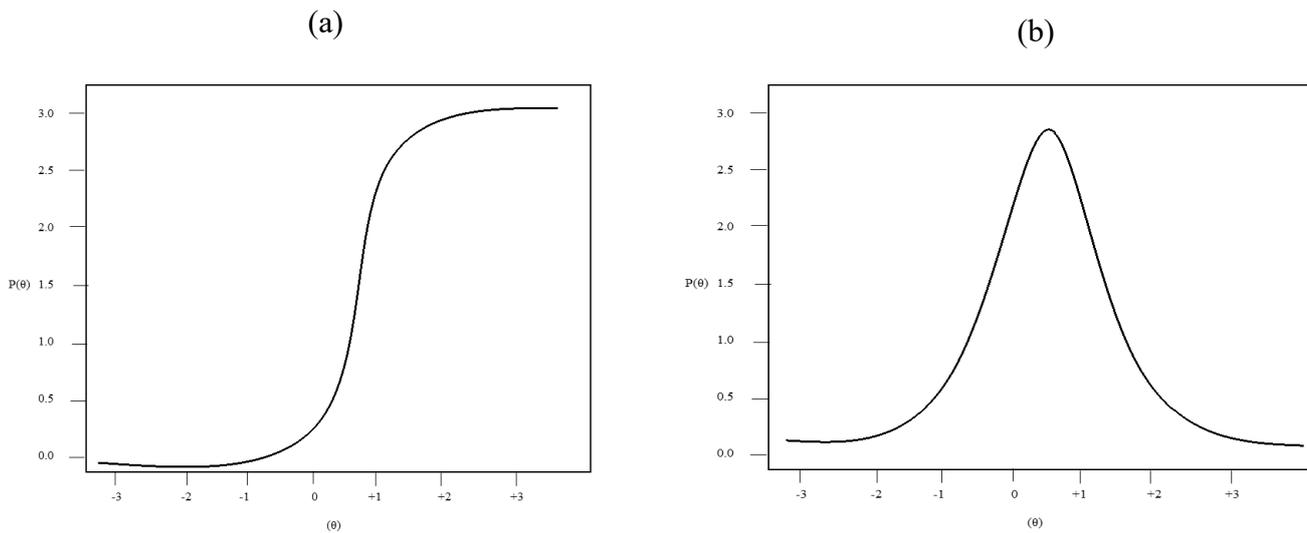
A major advantage of the theoretical utility of the unfolding model is that response patterns are examined from a non-monotonic perspective. Thus, the items of a test may occupy positions with different meanings on the continuum, because individuals' response processes are based on their decision that the item's content is consistent with their own attitudes and/or behaviors (Liu & Chalmers, 2018). Such a perspective allows for the examination of any potential ethical leadership graduation as theoretically proposed (Carroll, 2000; Treviňo et al., 2003), and provides justification as to whether ethical leadership entails different levels of ethical behavior manifestations or not. If an unfolding model is found to have a better fit to an ethical leadership test, then ethical leadership should be perceived as a bipolar construct, suggesting that opposing meanings exist on the same nomonological continuum, thus giving support to identify different ethical leadership gradations.

The unfolding IRT model has attracted interest especially in constructs measuring personality and work performance (e.g., Liu & Chalmers, 2018; Stark et al., 2006; Zampetakis et al., 2015). To date, there is only one study that applies the unfolding process to a leadership model, namely the leader-member exchange model (Scherbaum et al., 2006). In their study, Scherbaum et al. (2006) found that the unfolding model fits better compared to other IRT models (i.e., the graded response model) and designated an ideal point response process for their measure. In contrast to the concept of maximum exchange quality, the authors concluded that the greatest amount of information regarding the quality of exchange between leader and member is found at the average levels of exchange quality. Accordingly, the measure is less accurate for those individuals with extreme levels of positive or negative exchange quality.

Accordingly, it is suggested that the unfolding response process may also conform with the ethical leadership. Understanding the process, which underlies the ethical leaders' responses is important for understanding better the theoretical framework and providing accurate tests (e.g., Brown &Treviňo, 2006). To date, only dominance models have been proposed to all existing constructs measuring ethical leadership (e.g., Brown et al., 2005; Mitropoulou et al., 2020). These measures were constructed using linear confirmatory

factor analysis methods that tested the proximity between the individual and the item. An important theoretical question for the advancement of research in this area is whether the response on an ethical leadership item is consistent with this dominant model or ideal response pointsexist. In accordance to this inquiry, this paper compares a dominance IRT model and an unfolding IRT model to identify which one fits ethical leadership model best.The IRT unfolding process is based on the individual's level of agreement with a statement, since the person provides information about him/herself on whether he or she agrees with an item (Liu & Chalmers, 2018). Thus, such analysis is conducted using self-reported measures. However, up until recently, this analysis was not possible for the ethical leadership model, because the concept lacked on self-reported measures.

Research objectives

The purpose of the present study is to compare a dominance and an unfolding IRT model to identify which one fits ethical leadership model best. Such information will further clarify our understanding on the ethical leadership theorem and enhance the construct's measurement. To do so, the first self-reported measure of Questionnaire of ethical Leadership (QueL) is used, because it is consistent with the theoretical framework proposed by Treviňo et al. (2000,2003) and is defined by two latent dimensions (Mitropoulou et al., 2020). The first dimension characterizes the ethical behaviors of the leader. This dimension is referred to as telos and reflects the concept of 'moral manager', i.e., the ethical means and ends of the leader's conduct. The second dimension defines the ethical characteristics of the leader and is called ethos. Ethos is considered identical to the concept of moral manager, as it represents the ethical foundations of the individual's personal attitudes and characteristics.

Under the unfolding paradigm, leaders completing the QueL will indicate their level of agreement with various ethical behaviors and attitudes. When individuals respond positively to the Quel statements, their closeness to the ethical leadership theorem will be justified. However, when individuals disagree with a statement, it may be due to either a negative or positive response decision. To better illustrate this, we propose the following example using the following item from the QueL: "Reward of ethical behavior. I recognize, reinforce and reward ethical initiatives and behaviors from followers". According to the unfolding process, leaders who exhibit ethical behaviors and attitudes at work may disagree with this statement, maybe because they view ethics as the only way to do things at work. They do not realize the necessity to provide rewards and recompenses to their followers, because working in accordance to ethics and following ethical standards in the workplace is considered mandatory. Alternatively, leaders, exhibiting less positive ethical attitudes and behaviors at work, may also disagree with this statement because they may perceive such practices as excessive and/or unnecessary. For this type of leaders, the work must be done in accordance with ethical standards and that is all followers need to do in order to maintain their job. These two possible latent responses, the "disagree from the above" and the "disagree from the below" are associated with the same observed response of disagree. Hence, a bell-shaped item response function may be considered as more appropriate to illustrate such latent response differences.

Therefore, the present study builds on previous theories (Brown &Treviňo, 2006; Treviňo et al., 2000; 2003) and examines two hypotheses. The first hypothesis states that occupational ethical leaders use an unfolding process of response to conduct ethics in their workplace, in contrast to the dominance process embraced by previous studies. This unfolding response model is hypothesized to have a significantly better fit with the two dimensions of ethical leadership (namely ethos and telos). The second hypothesis states that there are certain patterns of response processes that can be identified as different ethical leadership gradifications. If the unfolding response model fits the data better than a dominance model, it means that the likelihood of agreeing with an item is maximized when the item matches one's position on the ethical leadership spectrum, but the position on either side of the curve is associated with a different ethical leadership style (as shown in

Figure 1). These propositions will make an important contribution to ethical leadership theory and clarify whether ethical leaders exhibit different types of occupational conduct. Below, an unfolding and a dominant response model are estimated, with the unfolding model expected to show a significantly better fit to the data.

Method

Data and sampling

Participants are 648 Greek leaders with a mean age of 45.7 (*SD* = 10.3, age range 20-71 years), 66.2% held a university degree and 57.9% are male. Participants are occupied in different organizations (education, manufacture, public services and security forces). Data were collected between July 2013 and March 2015, as a part of a previous research project (Mitropoulou et al., 2020). Participation was voluntary; participants were informed about the research purpose prior to the completion and received an electronic or paper-and-pencil copy of the questionnaire. Due to the combinatorial use of an online link, the response rate could not be determined.Research data are publicly available via the Mendeley data at https://data.mendeley.com/datasets/6bkmm5x9y6/1

Measure

The questionnaire used in the present study is the first Greek self-report Questionnaire of ethical Leadership (QueL) (Mitropoulou et al., .2020). The QueL is provided as Supplementary Material 1 (English version). Leaders were given the 27-item measure to assess their ethical attitudes and behaviors, using a 6-point response scale (1= strongly disagree, 6= strongly agree). The QueL consists two latent ethical leadership dimensions, namely telos and ethos. Telos pertains to the leaders' ethical end, mean or purpose of behaviors and includes 16 items, while ethos refers to the leader's personal attitudes and characteristics and includes 11 items (c.f. Mitropoulou et al., 2020 for a detailed description). The QueL has a self-report and an observer-report version to examine ethical leadership following a 360o feedback perspective. The leader's (self-report) and the employee's (observer-report) scales have both been examined in occupational settings, exhibiting excellent psychometric properties (Mitropoulou et al., 2020).

IRT Analysis

Data were analyzed with the R (R Core Team, 2021). Prior to analysis, unidimensionality of each subscale was assessed. Parallel analysis was conducted with the r package 'psych' (v. 2.1.9; Revelle, 2021), in order to identify any items exhibiting a communality of less than 0.3. Item communalities are considered an important determinant of the items' conformability to the IRT assumption of unidimensionality and need to be addressed prior to analysis (Roberts et al., 2000). The syntax for all analyses contacted with R is provided as Supplementary Material 2.

The generalized graded unfolding (GGUM; Roberts et al., 2000) and the Graded Response Model (GRM; Samejima, 2016) IRT models were estimated in R using the package mirt (Liu & Chalmers, 2018) and ltm (Rizopoulos, 2006). The GGUM displays item location and discrimination parameters and allows for differential use of response categories across the subscale's items, while the GRM provides different discrimination and category threshold parameters. Each models' loglikelihood statistics and the commonly used comparative fit indices are used to determine which model provides the best fit: the Bayesian information criterion (BIC) and Akaike's information criterion (AIC). Value differences greater than 10 on AIC and BIC indicate model fit difference, with the lowest values exhibiting a better fit of this model (e.g., Zampetakis, 2011).

Results

Table 1 presents means, standard deviations and correlations of responses to the 27 QueL items. All correlations were statistically significant and ranged from $.15 < r < .62$ ($p<.001$). To determine the suitability of implementing unidimensional IRT models, parallel analysis was used. Results from parallel analysis scree plot identified one component that needed to be extracted for each QueL subscale. Similarly, the communalities of each subscale item were examined in order to identify any item exhibiting a communality of less than .30 on the component extracted. This is considered an operational definition of the items' conformability to the assumption of unidimensionality, as recommended by Roberts et al. (2000, p.18).

A GGUM and a GRM were estimated for the telos and ethos subscales of QueL (Table 2). In contrast to research hypothesis, the GGUM did not fit the research data better than the conventional dominant model for both cases. The GRM showed significantly better fit, suggesting that leaders are not likely to employ an unfolding response process when evaluating their ethical behaviors and attitudes in the workplace. The prevalence of the GRM model signifies that the 'standard' process of responding to ethical items is preferred to the unfolding process of responding. To further validate the GGUM's inferior fit to the data, the item location parameters (δi) for both subscales are presented in Table 3. Item location parameters demonstrate that there is no evidence of ordered (or unfolding) clustering of the item location for both subscales of ethical leadership. All QueL items are located in the negative side of the continuum, with item's 1 location parameter found to have the highest negative value ($\delta_1 = -1.30$). Interestingly, the location parameters for the telos subscale items are found to have higher values than those found for the ethos subscale; these items are perceived as a little more difficult to endorse by respondents. Plots of the expected item and expected total scoring functions were also estimated, to further validate the GGUM's fit to the data. Almost all expected item plots for both Quel items (including expected total score) are found to be dissimilar from the typically expected item score, shown at Figure 2-b. These findings too, further validate the poor fit of the GGUM to both ethical leadership subscales.

Discussion

The purpose of the present study was to examine whether ethical leaders exhibit an unfolding response process when measuring ethics in their workplace and, second, to identify whether there are response patterns consistent with ethical leadership gradification of ethical leadership, ethical neutral leadership and ethically hypocritical/fake leadership (e.g., Treviňo et al., 2000, 2003). The empirical results suggest that the unfolding paradigm does not fit the two-dimensional model of ethical leadership better than a pure dominance model, namely the graded-response model. Contrary to the research hypothesis, the GRM was found to have a significantly better fit with the data. However, results should not be disregarded, since findings can still contribute to the nomonological net. Under a theoretical perspective, these findings justify that the ethical leadership theory is ideally perceived as a cognitively oriented construct to which respondents report their 'maximum' rather than their 'typical' work behaviors and attitudes. Ethical values and behaviors are not typical responses to social interactions; they are fundamental features of the nomonological network of ethical leadership that govern not only their work, but their lives in general. Results empirically validate the qualitative findings of Treviňo et al., (2003), who focused on the visibility of the ethical actions and traits and commented: "*Ethical leaders are role models [...] who walk the ethical talk*" (p. 14).

These findings also shed light on the research question raised by Brown and Treviňo (2006) as to whether ethical leadership is best described as a continuum of different ethical leadership types. By examining the response patterns of ethical leaders, the second research hypothesis is also rejected.

Table 1. *Means, standard deviations and inter-item correlations*

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	5.32	0.90	-																										
2	5.26	0.92	0.62	-																									
3	5.21	0.96	0.54	0.48	-																								
4	5.18	0.95	0.50	0.44	0.44	-																							
5	5.07	0.99	0.51	0.51	0.43	0.56	-																						
6	5.02	1.00	0.49	0.51	0.37	0.46	0.49	-																					
7	5.13	0.98	0.48	0.51	0.47	0.48	0.51	0.58	-																				
8	5.04	0.97	0.42	0.45	0.40	0.48	0.51	0.44	0.53	-																			
9	4.99	1.08	0.46	0.52	0.34	0.41	0.52	0.48	0.44	0.48	-																		
10	4.46	1.34	0.22	0.30	0.15	0.22	0.31	0.45	0.34	0.29	0.40	-																	
11	4.81	1.08	0.38	0.45	0.31	0.43	0.46	0.49	0.46	0.44	0.50	0.43	-																
12	4.82	1.02	0.49	0.47	0.38	0.47	0.54	0.54	0.55	0.49	0.48	0.39	0.51	-															
13	5.25	0.99	0.50	0.46	0.45	0.56	0.47	0.36	0.43	0.41	0.42	0.18	0.43	0.46	-														
14	5.18	0.88	0.43	0.47	0.35	0.45	0.48	0.47	0.49	0.45	0.41	0.31	0.44	0.54	0.47	-													
15	5.08	0.91	0.50	0.50	0.43	0.44	0.51	0.56	0.57	0.48	0.49	0.34	0.52	0.59	0.45	0.58	-												
16	4.80	1.06	0.42	0.53	0.33	0.37	0.52	0.50	0.53	0.47	0.54	0.46	0.51	0.62	0.41	0.55	0.62	-											
17	4.76	1.13	0.46	0.43	0.41	0.49	0.47	0.48	0.50	0.39	0.44	0.35	0.42	0.54	0.54	0.48	0.53	0.54	-										
18	5.00	1.06	0.32	0.32	0.19	0.35	0.36	0.39	0.42	0.29	0.37	0.36	0.38	0.46	0.28	0.41	0.46	0.48	0.46	-									
19	5.10	0.94	0.36	0.39	0.31	0.48	0.42	0.47	0.49	0.40	0.42	0.30	0.42	0.54	0.49	0.58	0.48	0.49	0.50	0.51	-								
20	5.67	1.10	0.32	0.38	0.32	0.35	0.40	0.44	0.52	0.44	0.39	0.37	0.44	0.53	0.39	0.44	0.50	0.55	0.52	0.45	0.50	-							
21	5.06	0.95	0.37	0.40	0.31	0.40	0.41	0.45	0.47	0.41	0.34	0.33	0.47	0.50	0.44	0.49	0.53	0.50	0.45	0.37	0.51	0.44	-						
22	5.26	0.88	0.45	0.45	0.34	0.50	0.47	0.49	0.46	0.39	0.46	0.30	0.43	0.48	0.48	0.53	0.54	0.44	0.49	0.48	0.54	0.39	0.50	-					
23	4.91	1.07	0.32	0.38	0.25	0.40	0.44	0.49	0.47	0.41	0.39	0.37	0.52	0.52	0.35	0.49	0.55	0.56	0.46	0.46	0.46	0.55	0.55	0.51	-				
24	4.62	1.22	0.33	0.37	0.21	0.26	0.32	0.43	0.39	0.37	0.39	0.35	0.41	0.50	0.29	0.42	0.45	0.52	0.32	0.33	0.41	0.44	0.42	0.36	0.47	-			
25	5.30	0.93	0.50	0.52	0.40	0.43	0.42	0.38	0.40	0.36	0.44	0.21	0.41	0.41	0.56	0.49	0.45	0.39	0.41	0.29	0.45	0.36	0.46	0.53	0.34	0.41	-		
26	5.17	0.96	0.29	0.35	0.19	0.32	0.35	0.40	0.44	0.42	0.38	0.28	0.41	0.50	0.34	0.50	0.49	0.46	0.36	0.41	0.42	0.41	0.46	0.45	0.50	0.39	0.40	-	
27	4.77	1.16	0.25	0.33	0.20	0.30	0.41	0.44	0.39	0.40	0.35	0.37	0.40	0.48	0.26	0.41	0.46	0.55	0.39	0.40	0.39	0.50	0.40	0.38	0.55	0.42	0.34	0.53

Note. N = 647 leaders; all correlations are significant at the $p<.01$ level.

Table 2. *GGUM and GRM results for the QueL ethical leadership styles corresponding to the ethical behaviors (telos) and ethical characteristics (ethos) from leaders*

Scale (All Items)	Model	Parameters	Ll	Aic	Bic
Telos	GRM	**84**	**-11449.85**	**23091.71**	**23521.20**
	GGUM	110	-11531.98	23283.95	23776.08
Ethos	GRM	**56**	**-7394.81**	**14921.62**	**15216.90**
	GGUM	77	-7411.01	14976.01	15320.52

*Note.*N=648; GRM=graded response model; LL= Log-likelihood; AIC=Akaike's information criterion; BIC=Bayesian information criterion; Bold cells indicate better fitting model.

Table 3. *GGUM item location parameter estimated for both QueL subscales*

Ethos	δi	Telos	δi
Quel1	-1.30	Quel19	-1.11
Quel3	-1.16	Quel14	-1.09
Quel2	-1.10	Quel7	-1.08
Quel25	-0.77	Quel15	-1.01
Quel13	-0.76	Quel17	-1.06
Quel9	-0.65	Quel21	-0.95
Quel5	-0.63	Quel6	-0.88
Quel8	-0.62	Quel12	-0.87
Quel4	-0.62	Quel16	-0.81
Quel22	-0.40	Quel20	-0.78
Quel18	-0.34	Quel11	-0.77
		Quel26	-0.73
		Quel10	-0.70
		Quel23	-0.68
		Quel24	-0.65
		Quel27	-0.54

The prevalence of the dominance response process on our data postulated that the probability of responding to higher order categorical response stimuli is better understood as a monotonic function that increases as the intensity of the underlying trait increases. The response pattern of ethical leadership follows a

cumulative process; no continuum was identified that could lead to different ethical leadership gradification or typology.

The ethically hypocritical/fraud leadership and the ethically 'neutral' leadership styles are not considered as antithetical patterns of style to the general ethical leadership theorem after all (Brown &Treviňo, 2006). Ethical leaders are straightforward and sincere individuals who are honest and respectful of their concerns and motives. They value the visibility of their ethical actions and attributes; they are important occupational role models and lead by example. Consequently, any change (or opposition) to these behaviors will inevitably distort the way these leaders are perceived by others.

This study contributes to the literature by offering an empirically refined conceptualization of ethical leadership. We argue that ethical leadership is a more 'concrete' leadership style than originally proposed, based on specific ethical values and norms. These values and norms are viewed as timeless moral ideals; they are not influenced by specific professional conditions, which consequently may contribute to the departure from ethical leadership proposed by Greenbaum, Quade, and Bonner (2015). Leaders who dedicate their professional lives to ethics do not abdicate their socially significant ethical agents; they do not choose whether to use ethical communication or visibly demonstrate ethical behaviors in context. Ethics is a unique principle for discerning what is right and what is wrong. It prescribes what leaders should do, not what they choose to do, in terms of obligations, ethical attitudes, norms, and behaviors. If leaders are to be perceived as ethical, they should be true to their ethical values and communicate those values to others. Consequently, amoral and/or ethically neutral leaders are not seen as counterparts to ethical leaders; rather, they are distinct concepts that need to be explored further.

From an empirical perspective, the present study is testing the suggestion of Treviňo et al.'s (2000, 2003), namely whether the measurement of ethical leadership should be better perceived through an unfolding process.Results provide evidence that this is not the best methodological solution from the perspective of ethical theory (e.g., Brown &Treviňo, 2006). Ethical leadership remains a clear-cut, strong concept that can be adequately measured and trained with existing scales. Ethical leadership adheres to the cognitive process where the highest measurement score remains the best indication of ethical leadership in the workplace. Thus, an important implication is that organizational ethical leadership training programs should continue to focus on ethical virtues and norms, as these are considered the foundations of ethical leadership. Leaders must cultivate ethical virtues and continually teach ethical behaviors to promote such practices in their workplace.

Despite the important implications for research and practice, this study is not without limitations. First, our research does not provide evidence on a taxonomy regarding the ethical leadership construct; the unfolding IRT model used doesn't distinguish a typology based on empirical data, but rather increase the precision of the latent trait estimates (Liu & Chalmers, 2018). In order to further identify a typology of ethical leadership, one should better utilize a different method, such as Latent Class Analysis. Secondly, the data were collected from a single sample of Greek leaders. Consequently, cross-validation of the research findings with new data in other organizational settings and cultures seems warranted. Another limitation is the use of the snowball method for data collection. Such sampling methods are characterized by insufficient power to investigate model fit parameters in populations subgroups. However, the relatively high number of observations, along with the adequate variance of participants demographics, are considered to reach the minimum proposed for analysis with similar settings (e.g. Zampetakis, 2011).

Overall, the present study illuminates the relationship between leaders' ethical characteristics and behaviors and their response patterns under two different IRT models, an unfolding and a dominance model. Research outcomes justified that ethical leadership is best described by a dominance model that follows a monotonic response process. The results provide evidence that ethical leadership is a solid nomonological network that does not refer to different types of ethical leaders. To date, there is limited research on unethical

leadership (e.g., Eisenbeiss & Brodbeck, 2014). We encourage researchers to examine the underlying mechanisms of unethical leadership and attempt to shed light on their conceptual differences from ethical leadership. Consideration of developing alternative scales that might result in different types of leadership, such as neutral ethical leadership and hypocritical ethical leadership is suggested.

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ΕΜΠΕΙΡΙΚΗ ΕΡΓΑΣΙΑ | RESEARCH PAPER

Πως 'φτάνουν' οι ηγέτες στην ηθική ηγεσία: Αξιολόγηση του τρόπου απόκρισης των Ελλήνων ηγετών, σύμφωνα με το κυρίαρχο και το αναδιπλούμενο μοντέλο της Θεωρίας Απόκρισης του Στοιχείου

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Ηθική ηγεσία
Θεωρία Απόκρισης του Στοιχείου
Αναδιπλούμενο μοντέλο
Κυρίαρχο μοντέλο
Κλίμακα Ηθικής ηγεσίαΣ
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ΠΕΡΙΛΗΨΗ

Η ηθική ηγεσία έχει καθοριστικό ρόλο στις εργασιακές συμπεριφορές των υφιστάμενων με αποτέλεσμα το ερευνητικό ενδιαφέρον να εστιάσει στην αποσαφήνιση του εννοιολογικού της μοντέλου. Το μοντέλο της ηθικής ηγεσίας καθόρισε ότι υπάρχει μια εμφανής διαβάθμιση στην εκδήλωση της ηθικής ηγετικής συμπεριφοράς στον χώρο εργασίας, η οποία εκδηλώνεται από διαφορετικούς τύπους ηγέτη: τον ηθικό ηγέτη, τον ηθικά ουδέτερο ηγέτη και τον ηθικά υποκριτικό ηγέτη, ανάλογα με το επίπεδο δέσμευσής τους στην ηθική. Η προτεινόμενη διαβάθμιση της ηθικής ηγεσίας δεν είχε εξεταστεί εμπειρικά μέχρι και σήμερα. Η παρούσα μελέτη θέτει αυτό το ερώτημα και αξιολογεί τον τρόπο με τον οποίο Έλληνες ηγέτες ανταποκρίνονται στο τεστ αυτό-αξιολόγησης, εφαρμόζοντας τη Θεωρία Απόκρισης του Στοιχείου (Item Reponse Theory), και συγκεκριμένα το μοντέλο απόκρισης του ιδανικού σημείου/αναδιπλούμενης απόκρισης (*unfolding model*) και του κυρίαρχου μοντέλου (*dominance model*) της διαβαθμισμένης απόκρισης. Περίπου 650 Έλληνες προϊστάμενοι συμπλήρωσαν την Κλίμακα ΗΘΙκής ηγεσίαΣ (ΚΛΗΘΙΣ) αυτοαναφοράς. Τα αποτελέσματα της ανάλυσης έδειξαν ότι το αναδιπλούμενο μοντέλο απόκρισης έχει χειρότερη προσαρμογή σε σύγκριση με το μη αναδιπλούμενο (κυρίαρχο) μοντέλο απόκρισης. Επιπλέον, οι δείκτες δ όλων των στοιχείων δεν ανέδειξαν μοτίβα διαβαθμισμένων αποκρίσεων. Τα ευρήματα συμβάλουν σημαντικά στην αποσαφήνιση της έννοιας της ηθικής ηγεσίας τόσο θεωρητικά όσο και εμπειρικά. Η ηθική ηγεσία είναι τελικά μια θεμελιώδης αξία, η ύπαρξη της οποίας επιτρέπει στο άτομο να διακρίνει ξεκάθαρα τι είναι σωστό και λάθος στην εργασία. Οι διαβαθμίσεις στην εκδήλωση της ηθικής ηγεσίας, οι οποίες προτάθηκαν στο αρχικό στάδιο διαμόρφωσης της θεωρίας (δηλαδή ο ηθικά ουδέτερος και ο ηθικά υποκριτικός ηγέτης) φαίνεται να μην αποτελούν κομμάτι της συγκεκριμένης θεωρητικής προσέγγισης, αλλά διακριτές έννοιες, οι οποίες χρήζουν περαιτέρω διερεύνησης. Τέλος, αναφέρονται οι επιπτώσεις των συμπερασμάτων στην εκπαίδευση και στην αξιολόγηση της ηθικής ηγεσίας.