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An Investigation of the Effects of Authentic Leadership on Individual Creativity: A Research within Packaging Sector

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Abstract

Leadership has a significant role in highly competitive business environment for the sustainable success of the organization. In this competitive environment, individual creativity as an important factor of innovation is getting more and more important for the success of organization as well. Within this context, in this study it is aimed to investigate the effects of authentic leadership on individual creativity. Within the scope of the study, the survey was conducted with 177 employees working in sales and sales support positions in a global packaging company. As a general purpose of this research, it was found that authentic leadership significantly affects individual creativity. Other purpose of this study is to determine the effects of authentic leadership subdimensions on individual creativity. The results of this study show that balanced processing and self-awareness significantly affects individual creativity. However, relational transparency and internalized moral perspective do not significantly affect on individual creativity.

Keywords

Authentic Leadership, Individual Creativity, Packaging Sector

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Introduction

Leadership is one of the most interesting topics for the success of organizations in highly competitive and rapidly changing environment. There have been many different leadership models in the literature. In the 20th century, most of the leaders were using their powers on the subordinates to increase the performance. Those leadership types would not work especially on the millennial generation looking for the leaders who inspire and give freedom for making decisions how to reach the results. Hence, leaders' common features: charismatic, hierarchical and directive have been replaced with goal oriented, shared and authentic leader features in the present century.

On the other side, organizations which are open to innovations and changes, can develop faster. Organizations focus on employee creativity to find out new solutions to be able to compete in the market by differentiating their positions and to enhance loyalty and satisfaction of the customers.

In this perspective, authentic leadership invest on the employees by motivating and providing the proper environment for the employees to exhibit individual creativity which would lead innovation within the organization. Moreover, authentic leaders have significant impact on individual creativity by promoting strong relationships in the organization mainly based on trust, transparency, moral perspective and objectivity. Hence, authentic leaders also encourage their employees to express their thoughts or suggestions within this supportive environment which makes them feel confident. This gives employees an opportunity to increase their individual creativity. Hereby in this study, the effects of authentic leadership on individual creativity is investigated.

Literature Review

Authentic Leadership

There are many definitions of leadership in the literature. Drucker (1996) who is well known management guru defines the leadership as "the only definition of a leader is someone who has followers" (Drucker, 1996: 54).

The definition of leadership throughout the process of historical development has changed (Demirel and Kişman, 2014: 691). Throughout history, researchers have developed different theories about leadership. Until 1950s, some scholars who developed leader focused approaches, searched on the inherent qualities of the leader. Another group of scholars tried to clarify the behavior of the leader rather than the qualities of the leader. Up to 1980s, situational approach suggested that the most optimal match of the conditions and the leader brings the leader's effectiveness to the top level (Tabak et al., 2010: 73).

Recent studies in management field have revealed that traditional models in leadership styles are not sufficient and new leadership theories need to be developed. This new or modern theories focus on the different aspects of leadership process. The significant difference is the relationship between the leader and the follower which becomes the main topic of the scholars. These approaches are transactional leadership which depends on traditions and past; transformational leadership which is open to future, innovation and change; charismatic leadership which gives freedom to the employees and watches from a distance. Even, researchers developed many modern theories like authentic leadership, strategic leadership, implicit leadership and visionary leadership, as general future of these modern theories, claim that leader is the person who has the vision and shares the vision with others and makes the vision real (Bozkurt and Göral, 2013: 5). Although there are many leadership theories in literature, this study will focus on authentic leadership.

Authentic means "known to be true or genuine" (Hornby, 1995: 67). According to Turkish Language Association, authentic is defined as bearing the features existing from of old. Authenticity can be dated back to ancient Greek times. The word authentic can be traced to *authento* which is a Greek word meaning "to have full power" (Gardner et al., 2011: 1121). Kernis (2003: 13) designed as "authenticity can be characterized as reflecting the unobstructed operation of one's true, or core, self in one's daily enterprise". Also authenticity is having personal experiences which includes needs, beliefs, feelings, thoughts and wishes (Gardner et al., 2011: 1121).

Besides the definiton of leadership and authentic, authentic leadership means "*a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development*" (Walumbwa et al., 2008: 94).

Avolio et al. (2004: 802-804) define authentic leaders as the people who are aware of their own thoughts, behaviors and how it is perceived by others; who know the values of themselves and others, their ethical views, knowledge and strengths; who are self-confident, optimistic, moral and hopeful.

Shamir and Eilam (2005: 399) explain the development of the authentic leader by four components. First one is the development of the leader identity as being the core component of self-concept. Second component is the development of self-concept clarity and self-knowledge. Third one is the development of the targets aligned with the self-concept. Last one is the improvement of self expression which is the concurrency between self-concept and the behaviors of the leader.

While identifying the characteristics of authentic leadership, the most commonly used expressions by many scholars are integrity, positive energy, confidence, transparent, moral, optimism, honest, hope, trust, self-awareness and concern to followers (George 2016, Walumbwa et al. 2008, Gardner et al. 2005, Avolio et al. 2004). For example, Gardner et al. (2005: 345) describe authentic relationships as transparent, open, trustful, guiding to valuable objectives and giving attention to the development of the follower.

Morever, authentic leaders constructs a truthful relationship with their followers based on ethical and moral view. They provide also flexible and transparent relationships in their workteams. These relationships in an organization can improve team performance (Garcia-Guiu et al., 2015: 63). Another main significant impact of authentic leadership is fostering intrinsic motivation of followers causing well-being and joy (Otaghsara and Hamzehzadeh, 2017: 1129).

From the other side, authentic leadership promotes sharing information in team members. Hence this creates sharing team climate (Hahm, 2017: 4116). Similarly, authentic leaders try to create compatible conflict environments. In those kind of environments, people from different backgrounds make beneficial discussions which lead more creative and compatible solutions (Lyubovnikova et al., 2017: 61; Yıldız, 2013: 63). Additionaly, psychological safety and intrinsic motivation are promoted by authentic leader which makes the employees more creative (Müceldili et al., 2013: 675).

Moreover, authentic leadership affects the follower's work attitudes (commitment, job satisfaction, engagement) and behaviors (job performance, extra effort, withdrawal behaviors) in a positive way (Lyubovnikova et al., 2017: 61; Avolio et al., 2004: 815). According to a conceptual framework for authentic leader and follower development, follower outcomes are trust, engagement, workplace well-being which enhance sustainable and veritable follower performance (Gardner et al., 2005: 346).

Authentic leadership is decribed as having different dimensions by different authors in the scholars. Fundametally, they are specifying similar concepts with some differences in the historical development. Kernis (2003: 13) proposes the dimensions of authentic leadership as awareness, unbiased processing, action and relational orientation. Similar dimensions are also used by Illies et al. (2005: 376). Later on, Avolio and Gardner (2005: 317) mentioned the term balanced processing instead of unbiased processing and also considered relational transparency term instead of relational authenticity. Thereafter, Walumbwa et al. (2008) identified the same dimensions of authentic leadership as introduced by Illies et al. (2005). Walumbwa et al. (2008: 95) propose four dimensions: self-awareness, relational transparency, internalized moral perspective, and balanced processing.

In this study, Walumbwa et al.'s (2008) leadership approach and their dimensions will be used.

Self-awareness: Walumbwa et al. (2008: 95) explain self-awareness as "*demonstrating an understanding of how one derives and makes meaning of the world and how that meaning making process impacts the way one views himself or herself over time. It also refers to showing an understanding of one's strengths and weaknesses and the multifaceted nature of the self, which includes gaining insight into the self through exposure to others, and being cognizant of one's impact on other people*". Goleman (2004: 4) also specifies the deep understanding of one's weaknesses and strenghts and in addition of these, understanding of needs, emotions and drives are expressed while explaining self-awareness. In other words, self-awareness indicates that the leader has a correct self knowledge and realizes its effects on other people. Higher levels of self-awareness encourage the understanding of oneself concerning ideals, beliefs, values, also strenghts and weaknesses. Self-awareness is referring to the leaders using self knowledge to influence their organization which can develop their capacity for development of their followers (Hannah et al., 2011: 562).

Relational transparency: Walumbwa et al. (2008: 95) are explaining relational transparency as "*this manner provides trust by sharing information openly and declaring real feelings and thoughts*". In other words*,* Gardner et al. (2005: 347) define relational transparency as the leader acts self-disclosure, frankness and trust in close relations. In another point of view, relational transparency describes the leader's ability to share own feeling and knowledge while avoiding to reveal the negative feelings. In this way, it is possible for the authentic leader to be recognized more accurately and the followers are aware of the values and goals of the leader more correctly (Yeşiltaş et al., 2013: 337). In a similar vein, relational transparency is explained as the demonstration of leader's authentic own self not the fake self to others. This manner builds up trust which contains the genuine emotions and thoughts of the leader instead of presenting negative feelings (Hahm, 2018: 114). In this context, relational transparency and sharing information openly is one of the critical dimension for authentic leadership. The key of this open relationship is providing trust and sharing information and experience directly without depending on conditions (Yıldız, 2013: 60).

Internalized moral perspective: Internalized moral perspective is described by Walumbwa et al. (2008: 95) as "*an internalized and integrated form of self-regulation*". Moreover, internalized moral perspective is expressed as "*a leader's inner drive to achieve behavioral integrity (i.e., consistency between values and actions)*"*.* According to Dinçer (2013: 61), based on self-regulation, leader can act with moral standards and values against the pressures of group, organization and society. Self-regulation emphasizes the behaviors of decision making in accordance with intrinsic values. The moral component of authentic leadership is defined as the practise of devoted and wholesome of leadership acting in accord with own self-concept (Hannah et al., 2005: 43). Internalized moral concept means that the person whose behaviors are aligned with

own's value pattern, choices and necessities. Authentic leadership need positive moral and ethical component. Especially, it is indicated that there are high level of moral standards and capabilities in the nature of authentic leadership to be able to solve moral dilemma (Tabak et al., 2012: 96). In a similar vein, internalized moral perspective is referring to the behavior of the leader who is acting in a moral and ethical framework. The quality of the process of authentic leadership and authentic relations are mostly based on the internalized moral perspective. Because the moral perspective of the leader is reflected to the morality of whole organization. In another word, having a positive moral perspective of the authentic leader also plays a significant role in the spread of a positive ethical understanding within the organization (Yeşiltaş et al., 2013: 337).

Balanced processing: Gardner et al. (2005: 347) indicate balanced processing as unbiased collecting and commenting the self-related information even it is negative or positive in nature. On the other hand, Kernis (2003: 14) defines the term unbiased processing as an expression of the absense of denying, exaggerations, distorting, ignoring internal experiences, private knowledge and externally based evaluative information. Rather than this, it refers to the presence of objectivity and acknowledgement of one's positive and negative attitudes and characteristics. As opposed to unbiased processing, Walumbwa et al. (2008: 95) consider the term balanced processing which is addresing to "the leaders who make decisions after evaluating all the concerning data objectively". Moreover, Avolio and Gardner (2005: 317) use the term "balanced processing" based on the research from cognitive psychology which argue that humans have biased and defective processors by birth. Authentic leaders demonstrate exactly objective manners without denying their positive and negative aspects also their competences and deficiencies. They exhibit the effort of developing these aspects. In other words, they evaluate the information without allowing distortion, exaggeration or denial. (Keser and Kocabaş, 2014: 4). In this regard, as authentic leaders interpret the information in a balanced manner, they are able to think of various sides and views of the issues (Öztürk, 2014: 33).

Individual Creativity

In English language, the root of word "creativity" comes from the verb "to create" which means "to cause something to exist; to make something new or original" (Hornby, 1995: 273). Amabile et al. (1996: 1155) who have significant contribution in the literature by focusing on creativity, defines it as "*the seed of all innovation, and psyhological perceptions of innovation (the implementation of people's ideas) within an organization are likely to impact the motivation to generate new ideas*".

Diakidoy and Kanari (1999: 227) defined creativity as a cognitive process, ability or characteristic of the person with the outcomes which are determined as novel and appropriate. However, İşler and Bilgin (2002: 135) propose a suspicious approach to the argument stating creativity as emerging suddenly from an uneducated and unprepared

mind. In other words, creativity can be fostered by an attensive, intense and regular learning. In the other perspective, creativity can be explained as solving a problem and providing a new and genuine thought or product by associating the things which the person learnt during life (Özen 2012: 232).

Besides, the definition of creativity, Solomon (2010: 34) defines individual creativity as "*the intentional introduction within one's work role of new and useful ideas, processes, products, or procedures*". Moreover, individual creativity is defined as the generation of solutions to complicated and difficult problems that are come up in the development process (Alfaro, 2015: 3).

In addition, George and Zhou (2001: 513) define creative behavior as "generation of novel and useful ideas by the individuals". In similar vein, Ausubel (1964: 344) defines individual creativity as to do something different, original or unique. Individuals who are creative must do something original in the sense of human experience, not only in the sense of self experience.

In other words, individual creativity is defined as finding new relations, looking at subjects from new standpoints and generating new combinations from old notions (Taggar, 2002: 320). In addition, people can propose different solutions to the same problem. This depends on how creative individuals are (Aktamış and Ergin, 2007: 11). According to individual creativity studies, creative people have some common personality traits such as self-confident, paying attention to complexity, having tolerance of uncertainity and intuitional (Çekmecelioğlu and Günsel, 2013: 258).

On the other side, Zhou and George (2003: 551) proposed the process of creativity by five stages: "identifying a problem or an opportunity", "gathering information and resources", "generating ideas", "evaluating, modifying and communicating ideas" and "implementing ideas". In opposite of other processes, these routes were not determined as sequential. Creativity can be initiated through any of them and then other routes may follow it.

Individual creativity has a critical importance for the organization to adapt to complicated and competitive environments, to innovate, to improve the performance, to provide competitive advantage and to achieve success and to survive in the market (Kanbur, 2015: 13).

Research Methodology

Purpose and Importance of the Research

The purpose of this study is to investigate the effects of authentic leadership on individual creativity. In the literature review, limited studies in Turkey which focus on the effects of authentic leadership on individual creativity were identified. Therefore, this study is aiming to fill this gap in the literature.

As discussed in the previous literature review parts, authentic leadership provides positive environment by promoting positive energy, trust, transparent and open relationships in the organization for the employees. In addition, authentic leadership encourages the development of the employees for the organizational success. Moreover, authentic leadership motivates the individuals to express their opinions and to find out alternative solutions for the challenges. Besides, authentic leadership provides supportive environment that leads increase in the level of individual creativity.

In other respects, there is a hard competition in the business environment as the companies need to be innovative to find out new solutions and also to improve the current solutions for competitive advantages. According to the literature review, individual creativity is a critical start point for innovation, in another words individual creativity is the building block of innovation. In this perspective, individual creativity can differentiate the company's position in the market by triggering innovative products or services. From this point, authentic leader has a significant role for the employee's innovative behaviors. The supportive, trustful, transparency in relations, self-awareness, moral perspective and unbiased manners of the leader empower the employee for participation and taking initiative for the responsibilities and exhibit more creative behaviors. For those reasons, in this research, it is aimed to investigate the effects of authentic leadership on individual creativity.

Participants and Sampling of the Research

This research was conducted on a global packaging company in sales and sales support positions. In this company, 276 employees work in these positions in 24 countries. For various reasons, the name of the company is kept confidential. The survey was conducted by online survey tool to 24 countries. The survey collection lasted about one month from 1 March to 31 March 2019. The sample size determined as 161 employees for a population of 276 employees, at a 95 percent confidence interval and 5 percent significance level. The data were obtained from 177 respondents.

Research Model, Variables and Hypothesis of the Study

In this research, there are two variables which are demonstrated in Figure 1. The independent variable of the research is authentic leadership. Authentic leadership has four dimensions which are "self-awareness", "relational transparency", "internalized moral perspective" and "balanced processing". The dependent variable of the study is individual creativity.
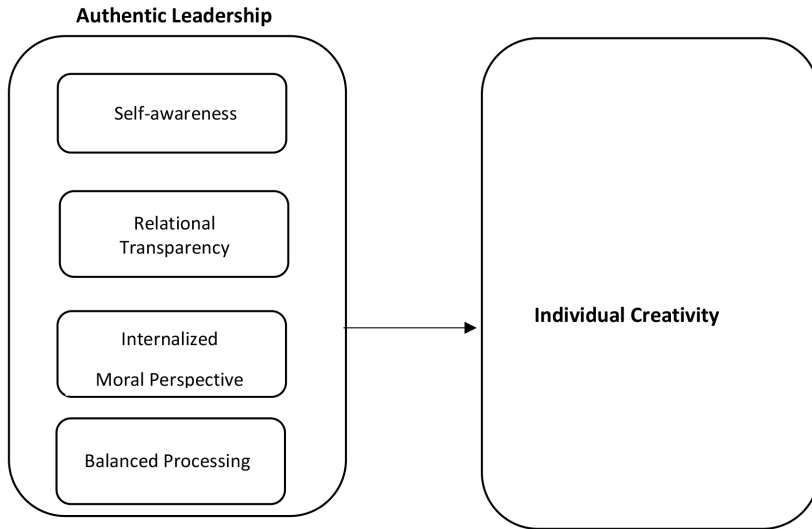
Authentic Leadership

Figure 1. Research Model

In this research, hypothesis has been determined for the purpose of investigating the effects of authentic leadership on individual creativity.

The research hypothesis is presented in below:

H_1: Authentic leadership significantly affects individual creativity.

Measurement Instrument of the Research Variables

English original survey forms are used in this research. The survey starts with a preliminary remark for respondents and consist of 3 main parts. The first part of the questionnaire consists of the questions to determine the demographic features of the respondents (gender, age, education, experience in working life, experience in current job).

In the second part of the questionnaire, the authentic leadership questionnaire (ALQ) is used. The scale is developed by Walumbwa et al. (2008). ALQ scale consist of 16 items with 4 dimensions, "relational transparency" measured by the items 1, 2, 3, 4, and 5; "internalized moral perspective" measured by 6, 7, 8, and 9; "balanced processing" measured by the items 10, 11, and 12 and "self-awareness" measured by the items 13, 14, 15 & 16. There are not any reverse statements in this scale.

In the third part of the questionnaire, there are statements determining the level of employees' tendency towards individual creativity. The individual creativity scale has been developed by George and Zhou (2001). The scale consists of 13 items. 3 items in the scale were adapted from Scott and Bruce (1994) and other 10 items were developed

by George and Zhou (2001). There are not any reverse statements in the scale. The items are reworded as first-person singular statements and used in this present research.

Both scales have been measured by using a 5-point Likert type scale from 1 to 5 with 1 "Strongly Disagree", 2 "Disagree", 3 "Neutral", 4 "Agree" and 5 "Strongly Agree".

Findings

Descriptive Statistics

The frequency distribution and percentages regarding the demographic features of the 177 employees working in packaging company are given in below;

75% of the respondents are male, and 25% of the respondents are female. According to responses, most of the respondents are at ages between 36-45 as 37%, 3% are between 18-25, 30% are between 26-35, 24% are between 46-55 and 6% are between 56-65. Most of the respondents hold a bachelor's degree at 51%, 14% of respondents hold a high school degree, 34% of respondents hold a master's degree and 1% hold a doctoral degree. The years of working life experience of the respondents concentrate on more than 15 years with 47%, 1% have less than 1 year experience, 3% have 1-3 years experience, 12% have 4-6 years experience, 8% have 7-9 years experience, 14% have 10-12 years experience and 15% have 13-15 years experience in their working life. The years of respondents at the current job percentage concentrates on 1-3 years with 33%, 10% have less than 1 year experience, 23% have 4-6 years experience, 14 % have 7-9 years experience, 10% have 10-12 years experience, 4% have 13-15 years experience, 6% have more than 15 years experience at their current job.

Factor, Reliability and Descriptive Analysis

In this section, factor, reliability and descriptive analysis regarding authentic leadership and individual creativity are provided. Authentic Leadership Factor, Reliability and Descriptive Analysis

In the factor analysis of authentic leadership scale the KMO value is found 0.93. In the factor analysis of authentic leadership, because of double loadings of "self-awareness item 2" and "self-awareness item 4" are eliminated from the scale. For this reason, factor analysis is made again. In the second factor analysis of authentic leadership scale, KMO value is found 0.925. This value is very close to 1. This test was found significant at 0.000 level. This shows an excellent value (Durmuş et al., 2011: 80).

Table 1

Factor, Reliability and Descriptive Analysis Results of Authentic Leadership

	Factor Loading			Reliability		Rotation Sums of Squared Loadings			Mean& Std. Deviation	
	1	2	3			Total	% of Variance	Cumulative %	Mean	Std. Dev.
Relational transparency 4	0.78								3.81	0.85
Relational transparency 1	0.76								3.89	0.76
Relational transparency 5	0.75			0.89		3.62	25.86	25.86	3.56	0.76
Relational transparency 3	0.73								4.03	0.83
Relational transparency 2	0.73								3.87	0.75
Internalized moral perspective 2		0.86			0.94				3.84	0.80
Internalized moral perspective 3		0.80		0.90		3.29	23.52	49.38	3.79	0.80
Internalized moral perspective 4		0.75							3.69	0.87
Internalized moral perspective 1		0.72							3,72	0,83
Balanced processing 3			0.82						3.78	0.89
Balanced processing 2			0.81						3.89	0.88
Balanced processing 1			0.74	0.88		3.12	22.33	71.72	3.48	0.79
Self-awareness 1			0.55						3.73	0.86
Self-awareness 3			0.53						3.54	0.85
								Authentic Leadership Avarage	3.75	0.82

The items of the authentic leadership scale are not permitted to be published in the study. Therefore, they are not written.

Authentic leadership original scale has 16 items as 4 dimensions. Those are "self-awareness", "relational transparency", "internalized moral perspective" and "balanced processing". In the factor analysis as shown in Table 1, there are 14 items and 3 factors emerged. Those are "relational transparency", "internalized moral perspective", "balanced processing and self-awareness". "Balanced processing and self-awareness" dimension was also found as one factor by the study of Müceldili et al. (2013: 679).

As shown in Table 1, "relational transparency" factor loading values were found between 0.78-0.73; "internalized moral perspective" factor loading values were found between 0.86-0.72; "balanced processing and self-awareness" factor loading values were found between 0.82-0.53. As shown in Table 1, reliability analysis regarding the authentic leadership scale cronbach alpha coefficient is 0.94. The reliability of each sub-dimension is also analysed. "Relational transparency" cronbach alpha is 0.89; "internalized moral perspective" cronbach alpha is 0.90 and "balanced processing and self-awareness" cronbach alpha is 0.88. This indicates a high reliability value (Sekaran, 1992: 307).

Table 1 also reflects the explained variances of 3 factors and the total explained variance of the scale. According to the table, "relational transparency" as first factor explains 25.86 percent of the variance, "internalized moral perspective" as second factor explains 23.52 percent of the variance, "balanced processing and self-awareness" as third factor explains 22.33 percent of the variance. The total explained variance is 71.72 percent.

The mean, and standard deviation values regarding authentic leadership is demonstrated also at Table 1. Authentic leadership scale consists of 14 items and is in form of 5-point likert scale. According to descriptive analysis, the mean values of authentic leadership are between 4.03 and 3.54. The average mean value of authentic leadership is 3.75. The average standard deviation is 0.82. When looked at average values, it can be stated that participants have moderately high authentic leadership perception.

Individual Creativity Factor, Reliability and Descriptive Analysis

In the factor analysis of individual creativity scale the KMO value is found 0.96. This value is very close to 1. This test was found significant at 0.000 level. This shows an excellent value (Durmuş et al., 2011: 80).

Table 2

Factor, Reliability and Descriptive Analysis Result of Individual Creativity

	Items	Factor Loading	Reliability	Rotation Sums of Squared Loadings			Mean& Std. Deviation	
				Total	% of Vari-ance	Cumu-lative %	Mean	Std. Dev.
IC1	"I suggest new ways to achieve goals or objectives."	0.80		7.562	58.16	58.16	3.89	0.76
IC2	"I come up with new and practical ideas to improve performance."	0.83					4.00	0.64
IC3	"I search out new technologies, processes, techniques, and/or product ideas."	0.75					3.84	0.72
IC4	"I suggest new ways to increase quality."	0.74					3.85	0.68
IC5	"I am a good source of creative ideas."	0.79					3.89	0.70
IC6	"I am not afraid to take risks."	0.66					3.87	0.69
IC7	"I promote and champion ideas to others."	0.76	0.94				3.92	0.66
IC8	"I exhibit creativity on the job when given the opportunity to."	0.80					4.02	0.63
IC9	"I develop adequate plans and schedules for the implementation of new ideas."	0.65					3.75	0.67
IC10	"I often have new and innovative ideas."	0.80					3.70	0.71
IC11	"I come up with creative solutions to problems."	0.77					3.98	0.64
IC12	"I often have a fresh approach to problems."	0.73					3.90	0.65
IC13	"I suggest new ways of performing work tasks."	0.76					3.76	0.69
				Individual Creativity Average			**3.88**	**0.67**

IC: Individual Creativity

According to the factor analysis shown in Table 2, all 13 items of the scale loaded strongly and distinctively on separate factors as in the original scale without any exception which means no items were dropped from the scale. As shown in Table 2, factor loading values were found between 0.65-0.83.

As shown in Table 2, reliability analysis regarding the individual creativity scale Cronbach Alpha coefficient is 0.94. This indicates a high reliability value (Sekaran, 1992: 307). Therefore, none of the items from the scale were eliminated.

Table 2 also reflects the explained variance of individual creativity. The total explained variance of individual creativity is 58.16 percent.

The mean, and standard deviation values regarding individual creativity are demonstrated at also Table 2. Individual creativity scale consists of 13 items and is in form of 5-point likert scale. According to descriptive analysis, the mean value of individual creativity are between 4.02 and 3.70. The average mean value of individual creativity is 3.88. The average standard deviation value is 0.67. When looked at average values, it can be stated that participants have moderately high individual creativity perception.

As a result, after the factor and reliability analysis, the latest situation of the scale is same as in original one which means it consists of one dimension and 13 items.

Hypothesis Testing

In this part, hypothesis determined before the analysis process are tested and results of the hypotheses are presented.

As shown in Figure 2, after factor analysis, the conceptual research model is changed. Thus, hypothesis is tested according to revised research model.
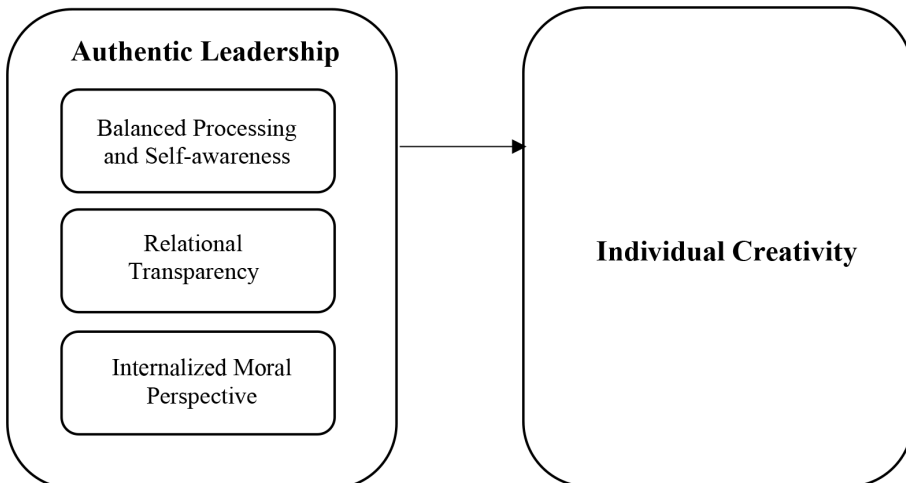

Figure 2. Revised Research Model

Regression analysis is conducted to measure whether there is an effect of authentic leadership on individual creativity. Preliminary analysis were conducted to ensure no violation of the assumptions of sample size, multi-colinearity, outliers and normality, linearity, homoscedasticity in order to conduct regression analysis.

Fort he purpose of this study, H_1 hypothesis is developed in order to measure the effects of authentic leadership on individual creativty.

H_1: Authentic leadership significantly affects individual creativity.

As seen on Table 3, in the regression analysis authentic leadership and individual creativity is added to the model. According to regression analysis findings, there is a significant effect of authentic leadership on individual creativity ($p=0.000<0.05$). Changes in individual creativity is explained by authentic leadership at 12.5% (Adjusted R^2). Also, as seen on Table 3, when one unit increases in authentic leadership, individual creativity increases by 0.360 (β). Therefore, it can be said that as authentic leadership increases, individual creativity rises. Thus, H_1 hypothesis is supported.

Table 3
Linear Regression Analysis Result of 1.H_1

Dependent Variable: Individual creativity			
Independent Variable:	**Beta**	**t value**	**p value**
Authentic leadership	0.360	5.112	0.000

R=0.360; **Adjusted R2**=0.125; **F value**=26.130; **p value**=0.000

As mentioned before, another purpose of this study is to determine the effects of authentic leadership subdimensions (balanced processing and self-awareness, relational transparency, internalized moral perspective) on individual creativity.

Stepwise regression analysis is conducted to measure whether there is an effect of "balanced processing and self-awareness", "relational transparency", "internalized moral perspective" on individual creativity.

The results of the stepwise regression analysis are shown in Table 4. According to the results, there is one model arise. For the model, adjusted R^2 value is 12.7%, F value is 9.509 and p value is 0.000. According to Model, the only variable influencing individual creativity is "balanced processing and self-awareness". Beta value of balanced processing and self-awareness is 0.274 which is positive. Thus, it can be said that as balanced processing and self-awareness increases, individual creativity rises.

Table 4

Stepwise Regression Analysis about the Effect of Authentic Leadership Dimensions on Individual Creativity

Model	Dependent Variable: Individual Creativity	Beta	Sig.	Adjusted R^2	F	Sig.
1	Relational transparency	0.144	0.159	0.127	9.509	0.000
	Internalized moral perspective	-0.118	0.860			
	Balanced processing and Self-awareness	0.274	0.012			

In this respect, "*balanced processing and self-awareness significantly affects individual creativity.*" However, "*relational transparency and internalized moral perspective does not significantly affect individual creativity.*"

At the same time, analyzes related to control variables were performed in the study. However, no difference was found as a result of the analysis.

Conclusion, Limitations And Recommendations

In today's highly competitive and rapidly changing business environment, leadership has a significant role for the sustainable success of the organization. In this highky competitive environment, organizations invest on innovation for new products and services to differentiate their organization to be able to compete. At this point, individual creativity is critical as a starting point of innovation.

Leadership is a lifelong process of self-discovery. In this perspective, leadership starts through own essence and being authentic. Authentic leaders develop and strengthen themselves through their life experiences and obstacles. Authentic leaders share the same goals and values with the followers and encourage them. Also, there are four dimensions of authentic leaders. These are self-awareness, relational transparency, internalized moral perspective and balanced processing. Self-awareness is critical to understand the meaning of the obstacles. Relational transparency promotes open environment where people can express their own thoughts and suggestions. Internalized moral perspective is core value of the leader. Authentic leaders build their leadership on their values and promote in the organization. Balanced processing would provide the environment where it is equal and objective for everyone. When the leaders are authentic, people follow them naturally and have willingness to make cooperation.

On the other side, due to globalization and development of technology, innovation is getting more and more important for the organizations to differentiate their positions and to achieve success in highly competitive business environment. At this point, individual creativity is the generation of novel and useful ideas which are transformed

to new products and services by innovation. Therefore, individual creativity is a building block of innovation.

Authentic leadership has a positive impact on individual creativity by providing relationships based on trust, objectivity, transparency, moral values and self-awareness. In this way, authentic leaders encourage the employees to express their thoughts and suggestions in open and safe environment. In this positive environment, employees are motivated by the leaders concerning the generation of the new ideas and solutions. Thereby, individual creativity is supported by the authentic leadership style. On the other hand, self-awareness, relational transparency, internalized moral perspective and balanced processing on the leader may also have positive impact on employees which increases individual creativity as well.

This research aims to investigate the effects of authentic leadership on individual creativity. For this purpose, this research was conducted with 177 employees working in a global packaging company. In this study, it is found that authentic leadership significantly affects individual creativity. It means that there is a positive relationship between authentic leadership and individual creativity. This result is consistent also with the previous researches in the literature (Hassan and Din 2019, Alzghoul et al. 2018, Chaudhary and Panda 2018, Hahm 2018, Mubarak and Noor 2018, Semedo et al. 2018, Sağlam 2017, Sanda and Arthur 2017, Zubair and Kamal 2017, Malik et al. 2016, Meng et al. 2016, Cerne et al. 2013, Dinçer 2013, Müceldili et al. 2013, Rego et al. 2012). It can be said that authentic leaders provide more supportive environment and relationships within the organization which promotes individual creativity.

Another finding of this study is that balanced processing and self-awareness significantly affects individual creativity. This result is consistent with the research of Müceldili et al. (2013). In this respect, it can be said that balanced processing which refers to evaluation all information in different aspects objectively before making decision, improves fairness within organization and makes the employees feel trust and confident in the working environment. Besides, self-awareness of the leader implies knowing the strengths and weaknesses and aware of the results of the actions on others. Authentic leaders evaluate the feedbacks from others for improvement. All these positive manners of authentic leaders motivate employees for individual creativity to express their thoughts and challenge with obstacles by providing new solutions.

Moreover, in this study, it is found that relational transparency which is dimension of authentic leadership does not significantly affect individual creativity. As opposed to transparency, creative work can be sometimes achieved in zones of privacy. On the other hand, transparency is very important, however leadership skills should be used smartly. In this perspective, leaders need to know what to share and when to withhold by getting the balance right (Cable and Birkinshaw, 2017).

In addition, one of the results of this study is internalized moral perspective which is the one of the dimensions of authentic leadership does not significantly affect individual creativity. This result can be explained that moral standards are developed through cultural impacts (Hannah et al., 2005: 45). In this perspective, it can be said that as the survey was conducted in different countries with employees from different cultures, the perception of moral perspective will differ.

As mentioned before, this study was carried out in the packaging industry. Creativity is important in packaging design to provide alternative solutions to reduce total cost in customer supply chain. Therefore, packaging engineers are employed in the sector. Because every company has different expectations from packaging and there are different standards in countries. Therefore, employees are employed to meet these needs. People who work in sales and sales support positions know these expectations best. Because they are in constant communication with customers. For example, customs regulations of countries may differ. Thus, employees make their designs by evaluating specific cost areas in logistic flow such as transportation and warehousing in accordance with the conditions of the country and using cost-effective raw materials. For this reason, considering all these aspects, creativity is expected from employees that are employed in the packaging industry. In this way, authentic leaders encourage the employees to express their thoughts. Thereby, authentic leadership style positively affects individual creativity.

Leadership is important for individual creativity. Leaders who have the features of authentic leadership increase individual creativity of the employees. Individual creativity is fostered in business environment based on cooperation. Leaders motivate the followers by providing vision and common goal with trustful and open relationships. These positive attitudes encourage creative behavior of the employees.

This study has some limitations. It was limited with only the employees working in sales and sales support positions in a packaging company. Other employees that work in this company and other employees that work in same and different sectors did not implicate to within the context of this research. Furthermore, time problem is one of the limitations in this research.

Other limitation of this research is that the sample of research consists of employees working in a global company in different countries. Because of the location distances, the surveys were collected through online survey tool by email. Also, another limitation is that the employees who participated in the survey are from different cultures, attitudes, behaviors and education background.

For future studies, it can be recommended to consider other variables to investigate the outcomes of authentic leadership in the organization such as team creativity,

organization identification, organizational silence, employee engagement, employee innovative behavior, self-motivation, job satisfaction, employee empowerment and organizational commitment.

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