

The Structural Relationship between Authentic Leadership, Psychological Capital and Individual Creativity of Korean Golf Leader

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Abstract: The purpose of this study is to investigate the relationship between the authentic leadership, psychological capital and individual creativity of golf instructor perceived by golf academy trainees. In order to achieve such purpose, the sample was extracted using the convenient sampling method targeting 250 applicants registered in a golf academy in Korea as of 2016 who wished to become a professional golfer. The survey was used as the research tool and Cronbach's α was between 0.818 and 0.872. The frequency analysis, correlation analysis, CFA and SEM analysis using SPSS 20.0 and Amos 20.0 were carried out as the data analysis methods. The results are as follows. First, the golf instructor's authentic leadership had a positive (+) impact on the psychological capital. Second, the authentic leadership had a negative (-) impact on the individual creativity. Third, the psychological capital had a positive (+) impact on the individual creativity. Professional athletes need to genuinely feel and experience internal values of their leaders in order to heighten their psychological capital and creativity in regard to their performance.

Key words: Authentic leadership, psychological capital, individual creativity, golf athlete, professional athlete

INTRODUCTION

A leader's efficient leadership is closely associated with individual athlete's capabilities and is a factor affecting the team and its members, therefore, it is considered an important part in efficiently managing a sports group (Seo, 2014). In Korean athletic groups, control and influence of a leader on athletes is strong and therefore, their leadership styles aimed at achieving goals strongly affect their sports group (Kim and Kim, 2000).

Positive leadership types including authentic leadership, transformational leadership and servant leadership are considered important in order to improve the ability of members by motivating the members and presenting a vision. Studies on positive leaderships regarding the transformational leadership with which a leader becomes an agent, presents a vision and applies strong motivation to members and the servant leadership (Schwartz, 1991) that considers members as parts of the team leader and achieves the goal through the establishment of consensus between members using advices and conversation have been carried out.

On the other hand, in the authentic leadership, a leader recognizes his/her moral standpoint, value, knowledge and strengths by himself/herself, possesses optimistic and high moral characteristics and leads transparent and open interactions from members by

showing the corresponding actions (Avolio *et al.*, 2004; Avolio and Gardner, 2005). In this regard, the authentic leadership shows a difference from the previous leadership types in that a leader with authenticity recognizes and displays his/her own characteristics precedent with actions and it has been recently receiving attention in the leadership field for such aspect.

Kim and Yoon (2015) lately noted that there needs to be consideration of whether leadership directly affects performance achieved by an organization and whether it first stimulates psychological elements of a team which in turn increases its performance. Choi *et al.* (2016) observed that attention is paid to psychological capital as a psychological concept that has effects before leadership influences team performance. Recent research on psychological capital largely involves its effects (Luthans *et al.*, 2007; Avey *et al.*, 2009; Kim, 2012; Ryu, 2016) but research on development and growth of individual members through psychological capital has been lacking. Nonetheless, recently, companies have had interest in creativity of their members as core elements to obtain competitiveness and create values and the importance of creativity has been steadily emphasized as a method for sustainable management (Devanna and Tichy, 1990).

As interest in creativity increases in situations of company management, research on different methods to heighten individual creativity in a group as a whole, not

just creativity of individual members has been conducting (Hoegl and Parboteeah, 2007; Pirola-Merlo and Mann, 2004; Taggar, 2002).

Therefore, this study aims to investigate the relationship between the psychological capital and individual creativity of golfers through the authentic leadership that emphasizes the authenticity of the leader. The research problems established for investigating such relationship are as follows. Does the golf instructor's authentic leadership have an impact on the psychological capital? Does the golf instructor's authentic leadership have an impact on the individual creativity? Does the psychological capital have an impact on the individual creativity?

MATERIALS AND METHODS

Research subject: For the target for investigation in this study, 250 golf athletes registered as a member in 10 golf academies located in Daejeon and Chungcheongbuk-do Province in 2016 were sampled using the convenience sampling method. A survey was used as the research tool and 205 copies except for 45 copies with insincere responses were used for data analysis.

Validity and reliability of research tool: The results of confirmatory factor analysis for each factor in order to see the validity and reliability of research tool showed $\chi^2 = 235.790$ (df = 132, $p < 0.001$) based on the goodness of fit, indicating that the research tool was inappropriate in Table 1 but it was confirmed that it satisfied the

standard of goodness-of-fit (CFI, TLI 0.8-0.9 or higher, RMR 0.05-0.08 or less) presented by Bagozzi and Dholakia (2002).

According to the factor loading, all factors showed 0.50 or higher, satisfying the standard and the statistical significance ($CR > 1.965$, $p < 0.05$) also, satisfied the standard, so that, convergent validity was secured (Woo, 2012; Kline, 1998). The correlation was analyzed in order to confirm the discriminant validity between the factors and the Average Variance Extracted (AVE) calculated between the factors was higher than the square of the correlation coefficient, so that, the discriminant validity was secured in Table 2. The result of calculating Cronbach's α in order to see the internal consistency of questions in the research tool showed 0.818~0.872, indicating the research tool was reliable (Nunnally and Bemstein, 1994).

Research process and data processing method: For the research process and data processing, cooperation was requested first to the survey respondents and the contents of the survey were explained, the survey respondents were asked to fill out the survey form using the self-administration method and then the completed survey forms were collected through direct collection on the spot, collection through revisit and mail. The survey forms that were considered as insincerely responded were excluded. The frequency analysis, correlation analysis, CFA and SEM analysis using SPSS 20.0 and Amos 20.0 were carried out as the data analysis methods.

Table 1: Confirmatory factor analysis and reliability

Factors/Items	SC	SE	EV	t-values	CR	AVE	Cronbach's α
Authentic leadership							
Being honest to oneself	0.617		0.255		0.902	0.608	0.818
Having consistency between behaviors and faiths	0.758	0.169	0.230	8.347***			
Being based on faith	0.710	0.165	0.269	7.983***			
Having consistency between values and behaviors	0.747	0.162	0.222	8.265***			
Observing ethics	0.540	0.163	0.424	6.474***			
Having authenticity	0.552	0.135	0.282	6.595***			
Psychological capital							
Having many resolutions	0.607		0.334		0.908	0.553	0.872
Making efforts to achieve goals	0.698	0.168	0.378	8.083***			
Making successful achievement of goals	0.769	0.170	0.289	8.647***			
Expecting the best results	0.699	0.168	0.376	8.091***			
Making efforts to look on the bright side	0.643	0.138	0.304	7.602***			
Having optimistic expectation	0.651	0.174	0.473	7.676***			
Confidently providing information	0.670	0.190	0.532	7.844***			
Making efforts to resolve frustration	0.705	0.157	0.323	8.141***			
Individual creativity							
Seeking for new methods	0.727		0.255		0.870	0.627	0.857
Proposing ideas to others	0.821	0.147	0.362	11.035***			
Adjusting training and schedules	0.832	0.155	0.381	11.164***			
Adjusting methods for improvement in results	0.754	0.144	0.465	10.178***			

$\chi^2 = 235.790$, (df = 132, $p < 0.001$), CFI = 0.936, TLI = 0.926, RMR = 0.036, RMSEA = 0.062***, $p < 0.001$

Table 2: Correlation between individual factors

Variables	Authentic leadership	Psychological capital	Individual creativity
Authentic leadership	0.608 ⁽¹⁾		
Psychological capital	0.608**	0.553 ⁽¹⁾	
Individual creativity	0.360**	0.643**	0.627 ⁽¹⁾

⁽¹⁾AVE; **p<0.01

RESULTS AND DISCUSSION

The result of carrying out the goodness of fit test for the research model established based on the theoretical grounds showed $\chi^2 = 235.790$ (df = 132, p<0.001), indicating that the research tool was inappropriate but it was confirmed that it satisfied the standard of goodness-of-fit (CFI, TLI 0.8-0.9 or higher, RMR 0.05-0.08 or less) presented by Bagozzi and Dholakia (2002) in Table 3.

As results of empirical analysis for hypothesis 1 in the relationship between the authentic leadership and psychological capital, the standardized coefficient was 0.731 and t-value was 6.299, showing a significant difference and supporting hypothesis 1 stating ‘the authentic leadership will have an impact on the psychological capital’ in Table 4.

Authentic leadership is a process of strengthening self-regulation and self-perception, thereby positively enhancing self-development (Luthans and Avolio, 2003). Unlike existing leadership theories that focused on a leader’s characteristics, behaviors and styles and emphasized his or her member’s changes, authentic leadership places importance on positive influence on his or her members based on the leader’s values and capabilities (Avolio and Gardner, 2005), helping to build their psychological capital, let alone, successful task performance and achievements (Kim and Yoon, 2015). In this context, Peterson *et al.* (2012) noted that members under authentic leadership formed positive psychological capital like increased patience, positive expectations of the future, resilience to overcome difficulties and hope and observed authentic leadership increased member’s psychological capital, all of which support the result of the present study.

Therefore, it is necessary to introduce programs that can boost leader’s authentic leadership aimed for those who lead the organizations to develop positive psychological capital.

In addition, in order for such authentic leadership to be effectively exerted, open organizational culture should be constructed together with free communication between leaders and their members, not the current rigid organizational culture among the coach and their athletes in sports teams for formation of positive psychological capital of players.

Table 3: Results of verification for appropriateness in research model

Research models	Values
χ^2	902.272
df	132
p-value	<0.001
CFI	0.936
TLI	0.926
RMR	0.036
RMSEA	0.062

As results of empirical analysis for hypothesis 2 in the relationship between the authentic leadership and individual creativity, the standardized coefficient was 0.204 and t-value was -2.099, also, showing a significant difference and supporting hypothesis 2 stating ‘the authentic leadership will have an impact on the individual creativity’ in Table 4.

Recently, companies recognize that creativity of their members is important for obtaining competitiveness, creation of values and sustainable management and they become more interested in creativity increase (Devanna and Tichy, 1990). Creativity concerns generation of new and useful ideas and derivation of solutions within an organization to which individuals belong (Amabile *et al.*, 1996). Cho (2012) noted that in manifesting creativity, authenticity was a critical element and therefore authenticity of a leader was crucial, Kim and Baek (2014) observed that authentic leadership was helpful for organizational member’s creativity and Rego *et al.* (2012) asserted authentic leadership had positive effect on organizational member’s creativity, all of which support the results of the present study.

Such results suggest that team’s performance should be accompanied by authentic leadership because heightened creativity of players may lead to successful achievements of individuals and teams in games. Therefore, development and dissemination of curricula for nurturing leadership appropriate for a sports team leader’s role performance is necessary. Given that creativity of individual athletes may not be obtained in a moment, creation of a team culture of encouragement and acceptance, rather than of fear about failures or mistakes in making creative ideas or attempts should be prioritized.

As results of empirical analysis for hypothesis 3 in the relationship between the psychological capital and individual creativity, the standardized coefficient was .910 and t-value was 6.016, showing a significant difference and supporting hypothesis 3 stating ‘the psychological capital will have an impact on the individual creativity’ in Table 4.

Psychological capital refers to positive psychological conditions including self-efficacy, hope, resilience and optimism (Luthans and Youssef, 2007). Psychological

Table 4: Results of hypothesis verification

Hypothesis	Path analysis	SC	SE	t-values	Sig.	Remarks
H ₁	Authentic leadership-Psychological capital	0.731	0.129	6.299	0.001	Accept
H ₂	Authentic leadership-Individual creativity	-0.204	0.154	-2.099	0.036	Accept
H ₃	Psychological capital-Individual creativity	0.910	0.183	6.016	0.001	Accept

capital aims for developing and applying individual strengths and positive psychological conditions. Those who have a high level of psychological capital are highly productive, satisfied with their job are friendly to others (Diener *et al.*, 1999) and seek for creative methods through a high level of motivation owing to their strong will to achieve their goals (Amabile, 1988).

In this connection, Rego *et al.* (2012) noted that psychological capital motivated formation of self-confidence and generation of creativity aimed at achieving a goal. Lyubomirsky *et al.* (2006) observed that positive expectation of the future induced creativity and Na and Byun (2016) asserted that companies should recognize the importance of individual creativity and strive for organizational member's formation of positive psychology.

Such research outcomes suggest that psychological capital should be created first for formation and increase in individual creativity that positively affects organizational performance. Thus, diverse training programs and welfare environment should be provided in order to form member's positive psychological capital and efforts should be made for psychological stability through individual management, rather than integral management by team unit as well as for resolution of athlete's psychological anxiety in contract and game situations.

CONCLUSION

This study aimed to examine relationship among authentic leadership, psychological capital and individual creativity and the conclusions are as follows.

First, authentic leadership was found to positively affect psychological capital and individual creativity. It was clarified that in order to improve psychological capital, a leader's authentic leadership is needed and open organizational culture should be formed among leaders and athletes together with dissemination of programs and training to enhance authentic leadership of leaders. Furthermore, in order to promote individual creativity, training related to authentic leadership appropriate for their role performance should be conducted and both leaders and athletes should make efforts to form organizational culture where they do not fear about failures and mistakes.

Second, psychological capital positively influences individual creativity. Efforts should be made to construct

psychological programs, training and welfare environment aimed at forming positive psychological capital of athletes and a system to manage individual athletes should be introduced, thereby enabling formation of their psychological stability and individual creativity.

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