

Full Length Research Paper

Influence of humorous leadership at workplace on the innovative behavior of leaders and their leadership effectiveness

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The influence of humor on interpersonal relationship and behavior has been attracting increasing attention from various enterprises. Participants of this study were Taiwan's corporate leaders and the influence of their styles of humor on innovative behavior and leadership effectiveness was examined. The study results showed that self-enhancing humor played a key role in leadership at work place. It not only enhanced leaders' innovative behavior but leadership effectiveness. On the other hand, aggressive humor showed a negative but small effect on leadership effectiveness. The results may serve as the criteria in the selection of prospective department heads/officials and facilitate the development of self-enhancing humor in various trainings.

Key word: Humorous leadership, humor style, innovative behavior, leadership effectiveness.

INTRODUCTION

In the modern world with rapid transformations, for example, globalization, liberalization and informatization, enterprises are faced with a more complex management setting and fiercer competition. Leaders in enterprises take greater responsibilities in the survival and development of their organizations, especially in the face of the financial tsunami that swiped through the world's economic system in 2009. Therefore, in any organization, the most important and influential person is no one but its leader. Leaders are crucial to organizations. Besides being responsible for the sustainable survival of the enterprises, they are in charge of leading the whole team and bringing out higher performances.

From this, it is known that leadership concerns activities in an organization or of its members. The rights of a leader in an organization are the power and

responsibilities inflicted upon him as a result of his position or task at work. A good leader can gather ideas from members of the organization and inspire the members' potential to integrate their actions through command or guidance, and promote efficiency at work. A good leader can also satisfy the needs of members of the organization so that they are spontaneous and work together toward accomplishment of organizational goals.

However, leaders in the past thought that they could demand that members of their organization follow their order because they were the ones with power. As a result, there was seldom interaction between leaders and members. It was a one-way road where members did what they were told. As the macro-environment changed, today's team members do not only request materialistic satisfaction, but also ask for respect and are highly respected. Under this circumstance, the powerful leadership in the past is no longer applicable. Leaders must develop a good and interactive setting to facilitate cooperation and open communications with and among members to ultimately achieve goals of the team.

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The rise of positive psychology in recent years indicates a shift from the past negative train of thought to the current positive psychological and health-related issues. Studies on humor are one of them. Humor is a multi-dimensional and complex concept that is mostly applied in psychology, education and mass communication. It is considered to carry the same concept as positive personal traits, for example, optimism, belief and courage. It contributes to the fun in the daily life, helps individuals deal with pressure and promotes personal charisma and interpersonal relationship. However, studies on humor are seldom applied to the workplace and issues like psychological fitness of employees, workplace friendship or organizational behavior; for example, leadership style, organizational culture, performance and innovation are seldom explored. In fact, the influence of humor on personal psychological status can be extended to the group. Avolio et al. (1999) indicated that humor was an important trait and competency of leaders. Leaders present this trait constantly to change their subordinates and followers. The humorous and inspiring leadership breaks away from doctrinal and empowers subordinates with more autonomy through interesting and jocular interactive behavior for the ultimate goal of achieving organizational goals and enhancing leadership effectiveness.

However, humor is like a double-edged sword (Malone, 1980) that carries both good and bad traits, just like the Chinese saying that "Water is a boon in the desert but the drowning man curses it." It can have both positive and negative influences. Therefore, among the different humor styles, there might be some that are not good for physical and mental health and can even be dangerous or harmful to oneself or others. In light of this, this study will explore the influence of humor styles adopted by leaders, or department heads in organizations, on the innovative behavior of the leaders and their leadership effectiveness from the perspective of subordinates based on the four humor styles established by Martinet et al. (2003).

LITERATURE REVIEW

Humorous leadership at workplace

Humor is the essential element in interpersonal interaction (Romero and Cruthirds, 2006) and plays an important role in the cohesion and interaction within a group (Wilson, 1979). Similarly, it has a certain effect on the workplace or an organization, too. For individuals at workplace, humor concerns their working mood and is a means for them to interact with members on their team. Adequate exercise of humor can create a fun atmosphere and resolve embarrassment, dilemmas and even conflicts among people, establishing familiarity with others and contribute to the quality of interpersonal relationship. It can also accumulate more support from other people in order to boost the psychological energy of an individual (Hampes,

1992; Kelly, 2002; Martin, 2001). In addition, humor helps relax muscle. With the sound of laughter and feel of happiness, one can develop positive emotions which offset the negative influences brought about by pressure at work. It is a stress moderator variable (Argyle, 1997; Lefcourt et al., 1995).

For leaders at workplace, humorous leadership may not be the primary criterion for business success but it is very important for building an effective team with high performance. Conger (1989) believed that frequent use of humor by leaders at workplace was an effective way to inspire or restore morale. Davis and Kleiner (1989) also proposed that leaders could achieve three substantial results by applying humor, that is; 1) lowered stress at work; 2) helped subordinates understand leaders' management models through the communication between them, and; 3) inspired subordinates or followers. Similarly, Craumer (2002) also believed that leaders could help subordinates to get along with one another and ease the tension among them by applying humor. This shows the crucial bridging role humor plays in workplace communications. Besides resolving the embarrassment resulting from different opinions, it helps maintain good interpersonal relationship among team members (McIlheran, 2006) and boost colleague love (Vaill, 1989). For leaders themselves, humor also represents a positive attitude to help them deal with difficulties successfully, without being defeated (Svebak, 1996).

In fact, humorous leadership can help enterprises and organizations establish a more proactive and positive culture (Clouse and Spurgeon, 1995). Quite a few studies show that humorous leadership has a direct or indirect influence on the performance of individuals and teams. Humor reinforces mutual affection and accordingly, boosts satisfaction from subordinates (Decker, 1987), while at the same time, enhancing team morale (Gruner, 1997). A good atmosphere in the organization inspires individuals and teams in their innovations and creativity (Csikszentmihalyi, 1996; Murdock and Ganim, 1993; Edgar and Pryor, 2003) and brings out more productivity (Avolio et al., 1999; Clouse and Spurgeon, 1995; Duncan and Feisal, 1989). In other words, humorous leadership cannot only effectively boost leadership effectiveness (Decker and Rotondo, 2001), but also help enterprises and organizations grow and revolutionize to improve the overall performance of their organization (Meyer, 1997). However, studies also show that, humorous leadership cannot completely affect the overall organizational performance. It relies on whether leaders can successfully apply humor and whether the humor applied fits the traits of their teams and individuals within the organization or not. All of these have to do with the efficacy of humor (Duncan, 1982; Romero and Pearson, 2004).

Humor styles

Is humor all good? For the past few years, people have

taken humor for a trustworthy personal trait (Martin et al., 2003). In fact, the definition of humor in western culture was negative in the beginning and gradually turned positive. In the past, Keith-Spiegel (1972) and Herring and Meggert (1994) thought that humor was a multi-layered concept that encompassed satires, jokes, slapstick and sarcasm, among other negative behavior. On the other hand, quite a few studies also found an inconsistent relationship between humor and psychological health or response to stress. For example, McClelland and Cheriff (1997) studied and found that people with a high sense of humor were not always with fewer physical diseases and symptoms. Kuiper and Martin (1998) found that people with a high sense of humor were not always presenting more positive emotions. Neither were they more optimistic, self-accepting and more in control of the external world. Nezelek and Derks (2001) also found that people with a high sense of humor were not always having higher interpersonal intimacy and a good interpersonal relationship. Therefore, among the different humor styles, there might be some that are not good for physical and mental health, and can even be dangerous and harmful to oneself and others.

Due to the fact that negative humor was seldom mentioned in the past, positive and negative applications of humor could not really be distinguished through humor measures. In light of this, Martin et al. (2003) established the framework for humor styles for the first time and produced the humor style questionnaire (HSQ). They divide humor styles in a 2*2 approach to include two vectors; "to oneself or to others" and "beneficial or detrimental" as the main structures and measure of individual humor styles. From this, we see that humor is no longer a single field. It encompasses different styles and can be truthfully reflected in the real life. Further discussion describes the four different humor styles.

Self-enhancing humor

Self-enhancing humor is a positive humor style in favor of oneself. These people have a humorous attitude toward their life. When they deal with stress or difficulty, they inspire themselves through humor and maintain their positive awareness. It is an emotion-regulating or responsive defense mechanism. Self-enhancing humor is usually in a positive correlation with self-esteem, optimism and good mood; it is a negative correlation with nervousness and anxiety (Martin et al., 2003). This type of humor aims at strengthening one's self confidence. According to Romero and Cruthirds (2006), this type of humor is also meant to impress others. However, according to the definition by Martin et al. (2003), self-enhancing humor emphasizes more on the internal transformations of oneself and it is not easy for team members to be aware of that in the beginning.

Here is an example of this type of humor: A manager of

the training department in the sports industry who is also an international soft darts player often uses "I am God and I make impossible things possible" as his motto at work or in an international sports event.

Affiliative humor

Affiliative humor is a positive humor style in favor of others. This is spontaneous jocose and also a type of non-hostile humor. Affiliative humor focuses social interaction. It is like a lubricant that can easily ease out interpersonal strangeness and nervousness and instill enthusiasm into social occasions. Similarly, this type of humor is also in a positive correlation with self-esteem, optimism, and a good mood; it is negatively correlated with nervousness and anxiety. People who are good with this type of humor seem to be socially extraverted, happy, emotionally stable and caring (Martin et al., 2003). Applying affiliative humor in an organization is often built on the hope to minimize the strange feelings with subordinates, shorten mutual distance, try to bring members together and create solidarity and a positive environment so that the team can work toward common goals.

This example, explains this type of humor: A new general manager is bald, and at a welcome party, a young grassroots supervisor accidentally spilled wine on the general manager's head. Silence instantly took over the party and the young supervisor was all nervous. He did not know what to do. The general manager broke the ice by patting the supervisor on the shoulder and saying, "Buddy, this is definitely not the solution for hair loss."

Aggressive humor

Aggressive humor is a negative humor style detrimental to others. This is unhealthy humor based on the superiority theory that the speaker is better than others. It is humor with ridicule, sarcasm and jeer, and it is derogatory to the listeners. The speaker gets a sense of superiority by applying the humor. The more hurt the listeners, the more satisfied the speaker. In other words, the speaker builds his/her happiness on others' sufferings. According to Martin et al.'s study, aggressive humor is positively correlated with hostility, aggression, and nervousness, but it is yet to be explored whether it has a negative effect on the physical and mental health of individuals (Martin et al., 2003). Applying aggressive humor in an organization is meant to manipulate or order team members through one's sense of superiority. However, people in favor of this humor expression often fail to notice the potential impacts it has on the team members.

This example explains this type of humor: An employee in charge of financial reports recovered from bone fracture, as a result of a car accident and after taking a

month off work, he started working again. It might be because of the compromised mobility and familiarity with work after the long break that obvious mistakes were found in the reports submitted to the general manager. The general manager said teasingly: "Are you sure that you have recovered from your leg injury? Is it because of the broken bone that has not recovered that you cannot think clearly?"

Self-defeating humor

Self-defeating humor is a negative humor style detrimental to oneself. Martin et al. (2003) suggested that this was unhealthy humor too. The speaker appears to be over derogatory to himself/herself in order to impress others. This is a self-denying defense mechanism that tends to hide negative feelings away from problems through humor. This type of humor is often positively correlated with depression and anxiety, and negatively correlated with self-esteem, happiness and social support satisfaction (Martin et al., 2003). Applying self-defeating humor in an organization is meant to go along with everyone and get approval from others. However, when leaders use this type of humor, it may decrease the confidence subordinates have in the leaders (Zillmann and Stocking, 1976). However, from a different point of view, it is also possible that leaders apply self-defeating humor because they try to shorten the power distance between them and members in their organization. While they build a closer relationship, they are enhancing team members' self-esteem and increasing frequency of communications so that members can freely express and share their opinions. This argument is slightly different from that in past studies.

An example to explain this type of humor goes thus: The CEO of a company often makes fun of himself for having a bad memory "I always slept in the upper berth when I was a child. That's why I do not have a good memory." "Why? Are these two things even relevant?" asked his employee. "I fell off the bed too often and hurt my brain. That is why."

AIMS OF THE PRESENT STUDY

Combining the arguments aforementioned, we clearly know that proper humor is a quite important trait of leaders or department heads under the complex environment nowadays. As far as the overall organization is concerned, humor helps leaders establish and maintain an amiable relationship with their subordinates and shorten the power distance in between, to further boost their leadership. Just like Malone indicated in his study (1980), when humor was applied adequately, it could enhance the management process and performance. From this, it can be seen that humor will be an important

criterion to determine leadership effectiveness.

In addition, as far as leaders are concerned, humor helps them take on a new perspective in the face of challenges and strengthen their coping capabilities. Koestler (1964) believed that being humorous was to sensitively make an instantaneous link with two originally irrelevant things through occasional leads and this was also the biggest trait of creativity. Therefore, in solving creativity problems, leaders with a sense of humor can successfully analogize and associate them. In fact, creativity is possible through innovation and innovation is the process to turn creativity into profits, that is, to successfully practice creativity (Amabile, 1988; Amabile et al, 1996). From Scott and Bruce's (1994) point of view, an innovative behavior started with defined problems and generation of solutions, continued with searching for sponsors of ideas and attempting to establish a supportive alliance, and ended with production of innovative standards or models, and accomplishment of innovative ideas through extensive applications. Therefore, as far as corporate organizations are concerned, innovative behavior is one way to promote leadership effectiveness in the organization because it can effectively forecast performance indicators like corporate growth and profitability (Han et al., 1998). Therefore, leaders with a sense of humor will inspire themselves to come up with creative ideas and promote reinforcement and implementation, which is conducive to the performance of individuals, groups, or the overall organization.

Based on the arguments earlier pointed out, this study would extrapolate that adequate application of humorous leadership at workplace would help leaders with innovative behavior and their leadership effectiveness and adequate humorous leadership would also boost innovative behavior of leaders and exercise an effect on their leadership effectiveness. Therefore, this article takes on a subordinate's perspective and explores the cause and effect relationship between leaders' or department heads' personal innovative behavior and leadership effectiveness in the organization by four different humor styles. In the past, few studies applied humor styles to management workplaces and the issue about humor styles was mostly explored from the qualitative perspective. In light of this, this article takes on a more substantial quantitative approach in related empiricism to enable further tests on the results.

RESEARCH METHODS

Procedure

In this study, the subjects are leaders or department heads in Taiwanese corporations who are in charge of at least five people, but the survey respondents are subordinates who have spent more than one year working with these leaders or department heads. In other words, the questionnaire assesses supervisors from the perspective of subordinates. To avoid socially affirmative response in the survey, the questionnaire copies were not issued through

Table 1. Means, standard deviations, correlations and reliabilities.

Variable	Mean	SD	1	2	3	4	5	6
Affiliative humor	3.748	0.901	(0.88)					
Self-enhancing humor	3.758	0.701	0.636**	(0.80)				
Aggressive humor	2.980	0.784	-0.283**	-0.371**	(0.82)			
Self-defating humor	2.829	0.760	0.258**	0.368**	0.230**	(0.82)		
Innovative behavior	4.028	1.106	0.450**	0.583**	-0.367**	0.206**	(0.95)	
Leadership effectiveness	3.959	0.930	0.458**	0.600**	-0.512**	0.126**	0.752**	(0.89)

1; Cronbach's α are on the diagonal; 2; N = 381; 3; **P \leq 0.01.

direct supervisors in the department and were completed by voluntary respondents instead.

Participants

A total of 487 copies of the questionnaire were given out with 381 valid copies collected. The recovery rate was 78%. Among the respondents, about 43% were males and 56% were females and about 49.3% were 25 to 34 years old. A majority of them (76.6%) had a college degree. In addition, most of the respondents (about 70.6%) were grassroots employees in the organization. A lot of them (about 55.1%) had worked for the organization for 1 to 3 years.

Among the research subjects, about 71.4% were male supervisors and 28.3% were female supervisors and about 72.2% were 35 to 54 years old.

A majority of them (52.8%) had a college degree and quite a few (about 27.6%) had a graduate school degree. In addition, most of the direct supervisors (about 34.4%) were middle-ranking in the organization. Grassroots supervisors accounted for about 30.2%. A lot of them (about 27.8%) had worked for the organization for 4 to 9 years and those who had worked for the organization for 10 to 15 years accounted for about 25.2%.

Measurement instrument

This study collected data through questionnaires, that is, the humor style questionnaire, innovative behavior questionnaire and leadership effectiveness questionnaire. All items were from previously published and validated scales. All measures were assessed using a 6-point scale (from 1 = strongly disagree to 6 = strongly agree).

Humor style questionnaire

The humor style questionnaire in this study referred to the Chinese translation by Chen et al. (2010) of the humor style scale compiled by Martin et al. (2003). The four scales compiled were those for affiliative humor (8 items; Cronbach's α = 0.88), self-enhancing humor (8 items; Cronbach's α = 0.8), aggressive humor (8 items; Cronbach's α = 0.82) and self-defeating humor (8 items; Cronbach's α = 0.82), aiming at measuring the humor style subordinates believed to have been used by their supervisors.

Innovative behavior questionnaire

The purpose for using the innovative behavior scale compiled by Scott and Bruce (1994) was to obtain opinions from subordinates on the innovative behavior of their supervisors. It included 6 questions

in total. The scale's Cronbach's α was 0.95 with quite good reliability.

Leadership effectiveness questionnaire

The purpose for using the leadership effectiveness questionnaire compiled by Douglas and Ammeter (2004) was to obtain opinions from subordinates on their feelings about the leadership effectiveness of their supervisors. It included 7 questions in total. The scale's Cronbach's α was 0.89, with quite good reliability. The questionnaire encompassed columns on performance of leaders (3 items; Cronbach's α = 0.91) and performance of department (4 items; Cronbach's α = 0.78).

Analysis

This study adopted person correlation analysis to understand the relationship among the three questionnaires. In addition, it explored the influence of leaders' humor styles and their innovative behavior as well as the correlation between leaders' humor styles and their leadership effectiveness through multiple regression and canonical correlation analyses. Finally, it applied structural equation modeling to confirm the cause and effect relationship among humor styles, innovative behavior and the leadership effectiveness, while at the same time understanding their direct and indirect influences.

RESULTS

Table 1 provides the means, standard deviations, zero-order correlations and Cronbach's alphas for the variables in the study (with all reliabilities \geq 0.80). To test internal consistency and inter-correlation, the study used the Cronbach's alpha test. The result showed that all reliabilities were $>$ 0.8. As for the inter-correlation relationship, the study found that there were low to moderate correlation between all items except for the one between innovative behavior and leadership effectiveness. In addition, Pearson correlation analysis showed a positive correlation between positive humor styles, that is, affiliative humor and self-enhancing humor, and that they were in a positive correlation with self-defeating humor, innovative behavior, and leadership effectiveness, respectively, too. Among negative humor styles, aggressive humor was positively correlated with self-defeating humor only, and was negatively correlated with all the other humor styles. Surprisingly, besides having

Table 2. Multiple regression summary of humor styles versus supervisor innovations.

Independent variables	Unstandardized		Standardized	t-value	Collinearity	
	Beta	SD	Beta		VIF	CI value
Intercept	1.611	0.380		4.240		1.000
Affiliative humor	0.140	0.065	0.114	2.160 n.s.	1.696	7.310
Self-enhancing humor	0.648	0.094	0.411	6.924***	2.128	10.679
Aggressive humor	-0.281	0.068	-0.199	-4.097***	1.425	16.147
Self-defeating humor	0.104	0.070	0.071	1.473 n.s.	1.417	24.139

R = .615; R² = 0.379; adjusted R² = 0.578; F = 57.278***; *** P ≤ 0.001, n.s. P > 0.05.

a positive correlation with aggressive humor, self-defeating humor (a negative humor style) also appeared to be positively correlated with affiliative humor, self-enhancing humor, innovative behavior and the leadership effectiveness, and this was different from Martin et al.'s (2003) findings.

Humor styles and innovative behavior

This study adopted the forced entrance variance approach of multiple regression analysis to explain the influence of leaders' humor styles and their innovative behavior. Table 2 is the regression analysis summary and it shows that the four independent variables; affiliative humor, self-enhancing humor, aggressive humor and self-defeating humor, can explain 37% of variance to performance variables of innovative behavior (R = 0.615, R² = 0.379, p < 0.001, F = 57.278). In addition, self-enhancing humor has a significantly positive influence on leaders' innovative behavior ($\beta = 0.411$, $t = 6.924$, $p < 0.001$). That is, the more leaders can express their self-enhancing humor style, the more likely they have innovative behavior. On the contrary, aggressive humor has a significantly negative influence on innovative behavior ($\beta = -0.199$, $t = -4.097$, $p < 0.001$). That is, leaders who are more aggressive in their sense of humor, the more unlikely they will have innovative behavior, only that the degree of influence is not significant. In collinearity, all of the four regression analysis models had a VIF value between 1.417 and 2.128 and none of them was greater than the assessment indicator value of 10 and all of their CI values were smaller than 30, indicating that there was no issue about overlapped collinearity among independent variables of the regression equations.

Humor styles and leadership effectiveness

To explore the correlation between leaders' humor styles and their leadership effectiveness, canonical correlation analysis is used in this study. The canonical correlation analysis summary in Table 3 shows that among the two selected canonical correlations, only one pair of canonical

factors reach statistical significance whose $\rho = 0.709$ ($p < 0.001$) and $\rho^2 = 0.503$, indicating that the mutually explainable variance is 50.3%. As far as the canonical correlation structural coefficients are concerned, among the variables in group X, a positive correlation primarily exists between positive humor styles, that is, affiliative humor and self-enhancing humor, and the first canonical factor (χ_1), with a load of 0.682 and 0.875, respectively; a negative correlation exists between aggressive humor and the first canonical factor (χ_1) with a load of -0.755. Therefore, the first canonical factor (χ_1) is named positive humor. On the other hand, among the variables in group Y, both leaders' performance and departmental performance have a positive correlation with the first canonical factor (η_1), with a load of 0.999 and 0.757, respectively. As a whole, it is still considered a factor for leadership effectiveness. From this, it is seen that the more capable leaders are in applying positive humor, the more effective their leadership will be.

Humor styles, innovative behavior and leadership effectiveness

This study applied structural equation modeling to confirm the cause and effect relationship among humor styles, innovative behavior and leadership effectiveness, while at the same time understanding their direct and indirect influences. Table 4 shows the good-of-fit test of the model. In χ^2 test, the results $\chi^2 = 2674.72$, $df = 725$, $p = 0.00$ at a significance level of 0.05 seem to indicate that there is no good-of-fit between this model and the collected data. However, the results may have been compromised by the large sample size of 381 copies of questionnaire in total. Therefore, χ^2 / df was also used for the model agreement comparison. The obtained value was 3.69 which was smaller than 5. As far as model agreement is concerned, this is not satisfactory but acceptable.

Common indices regarding good-of-fit include GFI, AGFI, PGFI, NFI, NNFI, IFI and RFI. In terms of an ideal agreement, the PGFI should be greater than 0.5 and the other indices should be above the threshold of 0.9.

Results showed a good agreement among all of these

Table 3. Canonical correlation analysis summary of humor styles versus leadership effectiveness.

Independent variables	Canonical variate		Dependent variables	Canonical	Variate
	X ₁	X ₂		η_1	η_2
Affiliative humor	0.682#	0.433	Leader performance	0.999#	0.043
Self-enhancing humor	0.875#	-0.298	Unit performance	0.757#	-0.654#
Aggressive humor	-0.755#	-0.159			
Self-defating humor	0.189	2.01			
Proportion of variance %	0.459	0.085	Proportion of variance %	0.785	0.215
Redundancy measure	0.230	0.000	Redundancy measure	0.394	0.001
Canonical correlation	P = 0.709	P = 0.051			
Eigenvalue ρ^2	.503	.003			
Significance P	.000	.807			

as |Canonical Loading| \geq 0.5.

Table 4. Overall model for good-of-fit assessment indices.

Indices	Determine	Results
χ^2 test		
χ^2 test	$P \geq 0.05$	$\chi^2 = 2674.72, df=725, P=.00$
χ^2/df	$\leq 2\sim 5$	3.69
		No
		Acceptable
Goodness-of-fit index		
GFI	≥ 0.90	0.69
AGFI	≥ 0.90	0.65
PGFI	≥ 0.50	0.61
NFI	≥ 0.90	0.91
NNFI	≥ 0.90	0.93
IFI	≥ 0.90	0.93
RFI	≥ 0.90	0.90
Alternative index		
CFI	≥ 0.90	0.93
PNFI	≥ 0.50	0.84
RMSEA	≤ 0.10	0.10
		Moderately

indices except for GFI and AGFI. As far as alternative indices are concerned, better good-of-fit was found when CFI = 0.93, > 0.9 , and PNFI = 0.84, > 0.5 . However, RMSEA = 0.1 and this was considered moderate good-of-fit as it was between 0.08 and 0.1. Overall, the model good-of-fit test was acceptable.

In terms of the good-of-fit test on the internal structure of the model, it focused primarily on the internal quality of the model, including the validity, reliability and significance of individual indices and the assessment of composite reliability between observable variables and latent variables. Among the 40 observable variables in the study, t values were all greater than 1.96 with significance and a majority of the observable variables reflected standardized factor loadings with a λ value between 0.40

and 0.97. Only factor loadings of 3 observable variables were between 0.33 and 0.36. Therefore, generally speaking, there was convergent validity. In addition, in reliability analysis, as far as the reliability of individual indices R^2 is concerned, all of the t values were greater than 1.96 with significance and reliability, too (Bollen, 1989). In composite reliability, the CR values of affiliative humor, self-enhancing humor, aggressive humor, self-defeating humor and innovative behavior and leadership effectiveness were 0.87, 0.81, 0.82, 0.83, 0.95 and 0.85, respectively, and were all greater than 0.6. Above test results showed that the internal consistency of latent constructs in this study was high and that all questions in these scales measured the same latent constructs and were reliable.

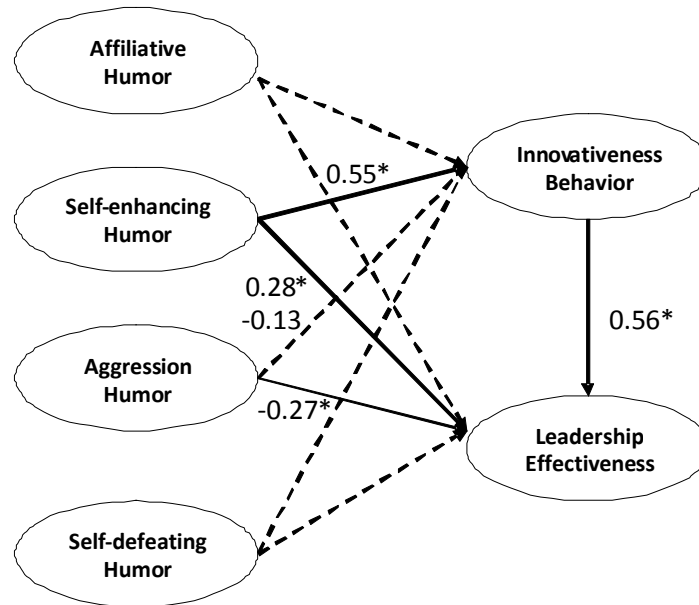


Figure 1. Cause and effect relationship among four humor styles, innovative behavior and leadership effectiveness.

The cause and effect relationship among humor styles, innovative behavior and leadership effectiveness in Figure 1 shows that self-enhancing humor can directly and positively affect leaders' innovative behavior and their leadership effectiveness whose direct effects are 0.55 and 0.28, respectively. In addition, self-enhancing humor can also affect leadership effectiveness positively through innovative behavior whose direct effect is 0.308. The overall effect is 0.588. Aggressive humor has a direct negative effect on leadership effectiveness. The direct effect is -0.27. Although, it does not have a significant influence on leaders' innovative behavior, the direct effect is -0.13. In addition, aggressive humor can also negatively influence leadership effectiveness through leaders' innovative behavior. The indirect effect is -0.073. Therefore, the overall effect is -0.343. As for affiliative humor and self-defeating humor, they do not have a significant influence on leaders' innovative behavior and leadership effectiveness in this model, either.

DISCUSSION

Self-enhancing humor and aggression humor at workplace

A primary purpose of this study was to explore the influence of leaders' or department heads' different humor styles at workplace on their own innovative behavior and leadership effectiveness. However, results showed that self-enhancing humor and aggressive humor could significantly affect leadership effectiveness and these two

styles could affect leadership effectiveness through leaders' innovative behavior too. When leaders or department heads consistently applied self-enhancing humor at workplace, it helped directly enhance the leaders' personal innovative behavior and their leadership effectiveness. In addition, self-enhancing humor could also contribute to reinforced leadership effectiveness through leaders' personal innovative behavior to make the leaders' performance more effective. On the other hand, when leaders or heads of department often applied aggressive humor, their leadership performance would be undermined. However, the negative effect of aggressive humor on leadership effectiveness, compared to the positive effect of self-enhancing humor on leadership effectiveness, was less intensive. Moreover, neither affiliative humor nor self-defeating humor had a significant influence on leaders' innovative behavior and leadership effectiveness in this study.

This indicates that self-enhancing humor exercises a decisive influence on the leadership performance at workplace. It is probably because challenges facing leaders or department heads in a highly competitive environment are not limited to interpersonal interactions and more stress may be lying in the accomplishment of organizational missions and objectives, and sometimes even the sustainable survival of the organization. Therefore, these leaders focus on their personal internal spiritual aspects and not entirely on their interpersonal relationship. In the face of difficulties and stress from work or in daily life, they often turn unfavorable situations into favorable ones with a positive attitude to prevent themselves from being caught in negative moods, while at

the same time, reinforcing their self-confidence. Self-enhancing humor was defined as a healthy defense mechanism that helps adjust one's emotional status (Dixon, 1980; Martin et al., 1993) in previous studies. In addition, leaders apply self-enhancing humor at workplace also to demonstrate their sufficient self-confidence and competency to help their subordinates solve problems. They can even put their innovative ideas about organizational development into practice to successfully lead everyone in breaking through challenges and unfavorable situations facing the organization. Therefore, self-enhancing humor cannot only enhance leaders' innovative behavior but also help them demonstrate their leadership effectiveness to ultimately accomplish organizational goals.

Self-defeating humor in HSQ

Martin et al. (2003) divided humor styles into positive and negative ones. Positive styles were affiliative humor and self-enhancing humor while negative ones were aggressive humor and self-defeating humor. However, Martin et al. (2003) did not find any negative correlation among aggressive humor, self-defeating humor, affiliative humor and self-enhancing humor. In fact, Chen and Martin (2007) and Frewen et al. (2008) indicated the same findings in their foreign studies. This may be because aggressive humor and self-defeating humor still build on humor. They are humors expressed jokingly, except that they contain some burlesques to others or to oneself.

Although different from related western studies, results of this study showed a significant correlation among aggressive humor, affiliative humor and self-enhancing humor. As a result, aggressive humor could be explicitly categorized as negative humor. Nevertheless, self-defeating humor continued to present a significant positive correlation with positive humor. The results are in perfect agreement with Chen et al.'s (2010) studies in Taiwan. From the statements above, we find that aggressive and self-defeating humor styles do indeed lead to distinctly different results under different cultural contexts in western and oriental societies, and this is especially true with self-defeating humor.

Self-defeating humor may carry completely different implications in western and oriental societies. In western societies, where individualism prevails, people care more about competition and self performance and their definition of modesty is "reduced self-recognition" instead of "no self-recognition at all" (Ho et al., 2010). Therefore, they do not agree with people who are derogatory to or make fun of themselves to make friends. Instead, they think that it is no good to one's self-esteem and is a demonstration of lack of self confidence. On the other hand, in oriental societies, people value collectivism. Modesty and self-defeating humor are virtues that people learn when they are still children. Denying recognition from the other party or saying something defeating to

oneself is a way to show humbleness and desired etiquette. This is universal in the Chinese society. Therefore, self-defeating humor is often interpreted as making fun of oneself. It means that the speaker has sufficient self-acceptance and self-insight. It is a good way to keep a harmonious interpersonal relationship and is a humor style widely accepted by the general public.

Conclusion

In summary, leaders or department heads should deal with the ever-changing and competitive environment by frequently applying self-enhancing humor at workplace and avoiding the use of aggressive humor in interpersonal communications. For organizations, a proactive approach is to include self-enhancing humor as one of the criteria in the selection of prospective department heads and to emphasize the development of self-enhancing humor in subsequent trainings. In addition, according to the results of this study, cultural background can have a great effect on how humor styles are expressed. Therefore, future studies focusing on cross-cultural comparisons between different industries or nationalities may serve as an important reference to humorous leadership at workplace.

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