Effectiveness of psychological capital on mistake management culture as a resource for learning in organization

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Abstract

Mistake management is rapidly emerging as an important, and can be overlooked, resource for learning in organization. Learning from workplace terminates ways directed to enhancement of skills and capabilities by workaday activities. Since current works almost are very complex that mistakes may not be eluded, organization should see these mistakes as an opportunity for learning that broadcast mistake management culture (MMC).

Psychological Capital (PsyCap) is one of construct contributes to the formation and dissemination of MMC. Thus this study investigates the effect of PsyCap on MMC. In this regards, it has been paid to how PsyCap factors such as self-efficacy, optimism, hope, and resiliency impact on MMC. A test based upon a sample of 207 nurses of four hospitals reveals that PsyCap has positive impacts on MMC.

Keywords: Self-efficacy; Optimism; Hope; Resiliency; Mistake management culture; Organizational Learning

Introduction

Workplace knowledge confines ways directed to enhancement of agilities and capabilities by workaday activities. This is of multiple importance for new firms, which regard themselves as learning organizations, to apply their personnel potential to compete within global bazaars. Bargaining to mistakes is a special vital resource of learning from workplace for such organizations, since contemporary works mostly are very intricate that mistakes may not be eschewed. A learning

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culture from mistakes in workplace insists of maximize them as forceful experiences of learning (Harteis & et.al, 2008, p.223).

There is a certain component of risk in everything we do. Its respect is originated of the testimony that mistakes are unavoidable in complex organizations (Harteis & et.al, 2008, p.223), that risk boosts in some organizations such as hospitals, Fire Stations, and complex industrials that people work in an uncontrolled situation and often inconstant environment (Nelson, 2010, p.426). Mistakes may reveal negative impacts (e.g., time losing, imperfective product) as well as positive impacts (e.g., innovation, learning).The theoretic understanding of the undesirable impacts of mistakes is so higher expanded than that of the potential desirable impacts of mistakes. Much of accident research and approaches within cognitive psychology, as well as popular ideas, have conceptualized errors as constituting primarily negative events. This line of research has supported the concept of error prevention-the effort to block erroneous actions whenever possible. The potential long-term positive consequences of errors, such as learning, innovation, and resilience, however, are less obvious, although people readily agree that they can learn from errors. In the long run, organizations that have an effective approach to errors may be more interest because these organizations learn from errors, are more apt to experiment, and are more likely to innovate. Unfortunately, much of the evidence for using a positive organizational attitude to errors is still anecdotal and needs to be empirically validated (Van Dyck & et.al, 2005, p.1228).

Given their inevitability, mistakes nevertheless offer the potential for learning through practice, experiences that could be used by organizations and by personnel to improve their practices. Therefore mistakes should not be seen as incidents which are to be ignored or even hidden, but rather as opportunities for productive learning. Such an orientation is paid to have a positive impact on learning and performance of and within organizations (Harteis & et.al, 2008, p.223).

Mistake management programs are valuable to all organizations in order to avoid and decrease material and spiritual costs of mistake, enrich organization learning, and a benefit that is much greater than financial savings lies in the fact that mistake management programs show our contacts that we stand behind our organizational mission and values, we stand behind our quality standards, and we have integrity and genuine concern for our contacts. In terms of community relations, it is priceless (Nelson, 2010, p.426).

One of the factors that seem to play important role in broadcasting MMC is PsyCap. Research reveals that PsyCap such as optimism cause to learn from faults and resolve them. Through dealing with mistakes and failures in an objective way, members have learned how to avoid repeating the same mistakes, which in turn helps them to obtain further success (Zhao & Hou, 2009, p.35).

Then, main question of present research focuses on impacts of PsyCap factors that can contribute MMC between hospital personnel.

Background

1. Organizational Workplace Learning

Theories of learning through work explain how people learn through engagement in everyday functions and social actions and reactions at work (Billett, 2001; Smith, 2003). Persons act in organization and define organizational learning culture as error detection and correction (Hung & et.al, 2010, p.287). Learning behaviors are defined "as an ongoing process of reflection and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results and discussing errors or unexpected outcomes of actions" (Chughtai & Buckley, 2010, p.245). The ability of organizations to learn is considered a "vital competency" that facilitates their success in an increasingly competitive environment (Botcheva & et.al, 2002, p. 422).

Organizational learning theory posits that organizational capacity must be built on learning (Zahra & George, 2002; Zahra et al., 2006; Zollo & Winter, 2002). To summarize, organizational learning culture is not merely the sum of individual learning, but also involves the barter of knowledge among organizations, teams, individuals and the environment. Organizational learning depends on clear organizational ends, a culture of sharing and a connection among organizational subsystems, structure and culture to achieve learning results (Hung & et.al, 2010, p.288). Seemingly, this is a process of developing a learning culture within these organizations-a culture that supports the systematic and continuous use of knowledge and information for improvement (Botcheva & et.al, 2002, p. 422).

In a related vein, Edmondson (2004) argues that employees' tendency to openly accept and communicate errors and their ability to design strategies for preventing these errors from recurring in the future can manifest in enhanced organizational learning and efficiency. Moreover, Tynan (2005) suggests that teams, in which members regularly point out each other's mistakes and pitfalls, argue and analyze errors constructively and make concerted efforts towards eliminating and correcting mistakes, perform better than teams in which members avoid engaging in these actions(Chughtai & Buckley, 2010, p.245). Dealing with mistakes is a particular strategic source of workplace learning for such organizations, because contemporary work often is so complex that mistakes cannot be avoided (Harteis & et.al, 2008). Therefore, management of mistake not only originates from learning in organization but it also cause to enhance organizational learning. As Harteis & et.al (2008) showed a greater appraisal of mistakes as opportunities for learning by

managers, but no differences in related strategies and emotions and mistakes are constructively dealt with, and that they are appraised as learning opportunities.

2. Mistake Management Culture

For organizational learning from errors, it is necessary to use active approaches to errors rather than more passive approaches (Rybowiak, 1999, p.528). It is important to note that errors are not only threatening, but offer opportunities as well (Van Dyck, 2009, p.30). A learning organization requires to have a positive attitude towards exploration and errors and to deal with errors actively. Errors are an important issue in work psychology for different reasons. First, it is the raw material that produces stress, accidents, inefficient human-machine interaction, quality and performance problems, and a bad climate. Thus, many recurrent problems in industry are related to the issue of errors. Second, attitudes towards errors and how one deal with them are indications of a company's organizational culture. Bureaucratic companies usually attempt to prevent errors at all costs, while entrepreneurial cultures have a more positive attitude towards errors and what one may learn from them. Thirdly, if a company tries to alter its culture or if one wants to introduce the issue of error in selection procedures, one needs a measure of error orientation (Rybowiak, 1999, p.528). Therefore, in light of the fact that human errors are inevitable, it seems important and helpful for organizations to rely not only on error prevention but also encourage individuals and organizations to discuss and share error experience, and in turn learn from errors, which is considered essential for organizational success (van Dyck & et.al, 2005). In fact, the ability of people to learn from errors has been well established by research on error management training (Heimbeck & et.al, 2003; Keith & Frese, 2005; Cigularov, 2010, p.1500). With regard to learning from errors, error management uses errors as learning opportunities and encourages exploration and experimentation. Error management, thus, overcomes the inherent conflict in allocating resources between control and learning perspectives (van Dyck & et al., 2005, p. 1229).Mistake management climate refers to employees' perceptions of "organizational practices related to communicating about errors, to sharing error knowledge, to helping in error situations, and to fast detecting and handling errors" (van Dyck & et al., 2005, p. 1229; Cigularov, 2010, p.1500). The major goals of error management are to deal effectively with errors and their consequences after the occurrence of an error and to prevent future errors. This is achieved by (1) promptly detecting, extensively analyzing, and openly communicating about errors, (2) effectively dealing with and reducing the negative error consequences, and (3) learning from errors, which are viewed as valuable learning opportunities (Cigularov, 2010, p.1500).

Mistake orientation as proposed by previous research and shown in table 1 is a multidimensional construct consisting of: (a) Error competence, (b) estimation whether one can learn from mistakes, (c) mistake risk taking, (d) stress from mistakes, (e) mistake anticipation, (f) tendency of covering up mistakes, (g) readiness to communicate about mistakes, and (h) thinking about mistakes (Harteis & et.al, 2008). Table 1 shows the factors of mistake management and its definition.

Table1: Factors of MMC (Rybowiak, 1999).

Factor Name	Definition
Error Competence	Knowledge/capability to deal with errors immediately.
Learning from Errors	Learning from errors so that work plans are optimized in the long-term.
Error Risk-Taking	General openness to errors; acceptance of errors as necessary to achieve goals.
Error Anticipation	Stable, negative attitude about errors based in pessimism and negative affectivity.
Error Strain	Being strained by errors and being fearful of them; reacting to errors with "high emotion"
Covering Up Errors	Strategy for handling errors used by anxious persons; reaction to organizational culture that is not error tolerant.
Error Communication	A propensity to talk about errors, both to warn co-workers and to ask for advice on how to solve them.
Thinking about Errors	Tendency to analyze/deconstruct error events; desire to understand errors and their causes.

According to definition of every construct and mistake management literature, it is assumed that error competence, learning from errors, error risk-taking, error anticipation, error communication, and thinking about errors related to MMC positively but error strain and covering up errors have negative relationship with MMC(see: Rybowiak, 1999).

3. Psychological capital and Research Hypotheses

Concern about trait-like personality and state-like psychological capacities of employees has received little attention by organizational behavior researchers (Luthans & et.al, 2005). Trait-like personality is not specific to any task or situation and tends to be consistent over time, whereas state-like psychological capacities are more specific to certain situations or tasks and tend to be more malleable over time (Nguyen & Nguyen, 2011, p.2; Youssef, & Luthans, 2007).

Luthans, Youssef, & Avolio (2007) propose four components of PsyCap as a State-Like Psychological Resource Capacity: self-efficacy, optimism, hope, and resiliency. They define PsyCap as: An individual's positive psychological state of development that is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed;

and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success. (Luthans, Youssef, & Avolio 2007, p.3; Youssef, & Luthans, 2007)

Self-efficacy is assumed to have been accumulated through the development of complex cognitive, social, linguistic, and/or physical skills that are acquired through experience. Studies showed that high self-efficacy is critical to most human performance (Sequeira & et.al, 2007; Nguyen & Nguyen, 2011; Rego & et.al, 2011; Clapp-Smith & et.al, 2011; Gooty & et.al, 2009). High self-efficacy expectations regarding performance in specific behavioral setting direct individuals to approach that setting, whereas low self-efficacy expectations lead individuals to avoid such setting (Babalola, 2009, p.186). This setting can be mistake management. In an organization with learning culture, as discussed above, MMC is an index for performance. As Potosky & Ramakrishna (2002) declared there is relationship between self-efficacy and learning in organization and learning-goal orientation is positively related to learning self-efficacy. Moreover, the concept of self-efficacy implies that employees have confidence to take on and put in the necessary effort to succeed when confronting challenging tasks. In safety critical organizations such as hospital, employees must feel confident that they have the necessary skills and technical knowledge required to understand risks and dangers involved in work operations, and the necessary professionalism and self confidence to report potential hazards (Eid & et.al, 2012, p.57). Because mistakes are a potential source for hazards, they must also respect the culture of mistake management. Thus, as Eid & et.al (2012) declared that self-efficacy can be regarded as fundamental to safety focused behavior. Therefore, first hypothesis was proposed as following:

H_1: Self - efficacy positively affect on MMC.

The concept of optimism refers to the workers' preferences and tendencies to make positive and realistic attributions about succeeding here and in the future (Eid & et.al, 2012, p.57). The concept of optimism is defined as an attributional style that explains positive events in terms of personal, permanent, and pervasive causes and negative events in terms of external, temporary, and situation-specific ones (Youssef & Luthans, 2007, p.778). This tendency to see the possibility to change the situation is also important in acting in accordance with safety rules and regulations, to take action and avoid determinism and fatalism in dealing with work related issues that may have safety implications, be they technical or human (Eid & et.al, 2012, p.57). Researchers found that optimism had a major impact on the work efficiency of insurance staff and optimism is highly correlated with employee satisfaction, work happiness, and work performance (Zhao & Hou, 2009, p.38). An optimist's interpretation of negative events primarily relies on externalizing and distancing himself

or herself from failures and has been associated with a broad range of positive outcomes (Luthans & Youssef, 2007, p.331). According to what was said, it is seem that an optimist person take opportunities of learning from mistake as possibility to change the situation and try to manage effectively instead of concealing it. This discussion brings us to our second hypothesis:

H_2: Optimism positively affect on MMC.

The concept of hope means a positive motivational state of the sense of success resulting from the interaction based on between agent (goal-oriented activity) and the path (plan to achieve its objectives) (Zhao & Hou, 2009, p.36). People with high hope usually effectively find or produce a variety of ways to obtain goals (Zhao & Hou, 2009, p.37). Hope is characterized by two dimensions: willpower and pathways (Snyder & Lopez, 2002). The willpower is the drive individuals experience to attain a goal. The pathways complement this drive by providing the psychological resources to find multiple, alternative paths to attaining a desired goal (Clapp-Smith & et.al, 2009, p.230). This tendency to seek out new opportunities and implement new equipment, procedures or knowledge to stay focused on safety focused behavior and loss prevention, is important to avoid slipping into an over confident and complacent attitude to safety issues (Eid & et.al, 2012, p.57). Because mistakes are perceived as obstacle and prolonger for coming off goals, then people's hope cause that they have been bewared from mistakes and if a mistake engender, one of the ways that exist in front of people's legs in order to obviate this obstacle of goals is mistake management and learning from it to prevent repeating it. as Gooty & et.al (2009) mentioned that hope is a motivational state that reflects an individual's capability to set valued goals (willpower) and a belief that she or he can overcome obstacles to achieve those valued goals (pathways) (Gooty & et.al, 2009, p.364). Therefore, third hypothesis was proposed as following:

H_3: Hope positively affect on MMC.

Finally, the concept of resilience is viewed generally as a positive reaction or adaptation in the encounter of risk or adversity (Norman & et.al, 2010, p.381) and refers to the individual tendency to sustain and bounce back and even beyond when beset by problems and adversity. This tendency to never give in and always seek to overcome problems and obstacles represents a valued asset in achieving desired outcomes as opposed to giving up or falling back when confronting difficult issues. In addition it is also worth acknowledging the perspective of "engineering resilience" which could be applied to the organizational level to assess the influences between individual and organizational resilience (Hollnagel & et.al, 2008). Resilience is "the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility"

(Avey & et.al, 2011). The evidence from clinical psychology is that highly resilient persons tend to be more effective in ambiguous situations and across a broad spectrum of life experiences. People with high resilience anticipate potential adversity or strains, make contingency plans to support and help employees cope with them, and are available and responsive when such persons reach out to them (Gardner & Schermerhorn, 2004, p.278). Resilient employees are likely to develop new ways of doing things when facing difficulties, failures, and opportunities. They are more able to recover from negative emotional experiences and more prone to experience positive emotions in the midst of stressful events (Rego & et.al, 2011, p.3). Preliminary research has begun to examine the impact of resiliency in the workplace. For example, a significant relationship was found between the resiliency of Chinese factory workers undergoing significant change and transformation and their supervisory rated performance (Luthans & et.al, 2005). Resiliency has also been found to be related to work attitudes of satisfaction, happiness, and commitment (Youssef & Luthans, 2007). It sound that one of the signs of resilience and divulging it in workplace is the way of encountering with occurred mistakes. It is realized that resilience cause that people apply mistake management more effectively. This perception brings us to our second hypothesis:

H_4: Resiliency positively affect on MMC.
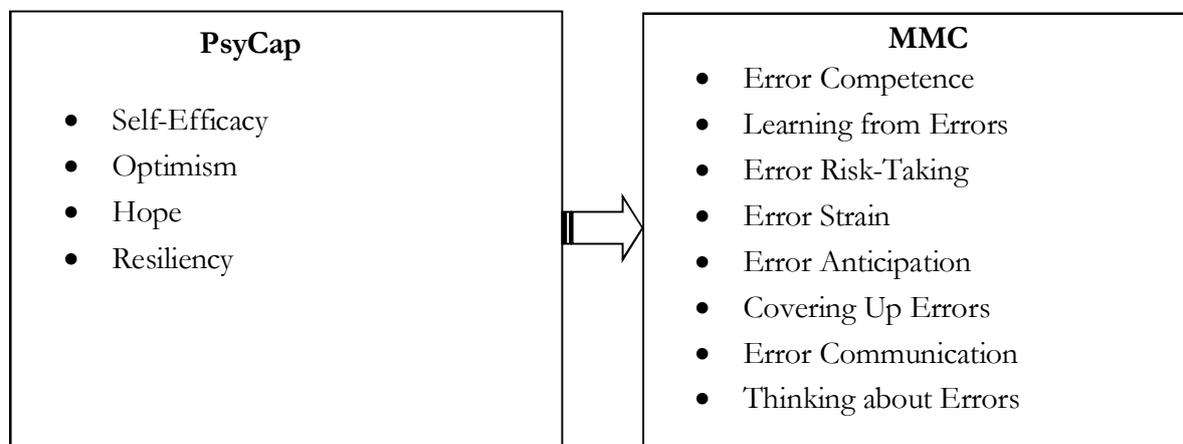
Fig.1. Potential effects of PsyCap on MMC

(Research conceptual model).

According to what is discussion about relationships between PsyCap Factors and Mistake management dimensions, as Jian & Hanling (2009) showed that PsyCap has positive effect on knowledge sharing and because learning from mistakes can be seem as Knowledge, as Zhao & Hou (2009) declared that PsyCap can create competitive advantages and learning from mistake is an advantage, and as Eid & et.al (2012) discussed that PsyCap is relevant to employees in safety critical

organizations because it may facilitate safety focused behavior and MMC is one of the facilities, and the importance of PsyCap on performance as expressed by Clapp-Smith & et.al (2011), and Rego & et.al (2011), and the effects of MMC on performance, and the results of other relevant researches, then, we proposed our major hypothesis as following:

H$_{Major}$: PsyCap positively affect on MMC.

Methodology

This is a cross-section survey which defining the impact of PsyCap on spreading MMC in safety critical organizations such as hospitals. For assessing this impact, the questions of Nguyen's (2011) questionarie for PsyCap measure and questions of Rybowiak & et.al's (1999) questionarie for MMC measure has been adopted and a questionarie was designed with items involve five-item Likert-type scale items. The results in Table 2 demonstrate that the measures used in the current study all exceed the commonly accepted standard of coefficient alpha 0.7 Note that this will only support our arguments for measure reliability. Totality, according to early sampling, the reliability of questionarie was .875 that was a good reliability.

Statistical Population, sample size, sampling method

Data was collected from nurses of four hospitals that voluntary participated in research plan in Mashhad city. Two hospitals were private and two hospitals were public. Sample size that was calculated by Gpower Software consisted of 207 nurses which were selected random sampling method from four centers. Data collection pursuited until attain 207 complete questionaires. Ratio of each two parts was considered equal.

Results

Descriptive statistics

53.6% of responders were female and 46.1% was male. Mean age of respondents was 34 years and mean of tenure were 9.85 years. Education of respondents was 20.3% diploma and under, 68.6% high deploma and BSc, 11.1% higher. Their monthly incomes was 25.2% 320$ and under, 57.5% between 320 and 640 Dollars, and 16.9% higer.

Measure validity

To test the construct validity of each scale, we conducted a confirmatory factor analysis (CFA) and analyzed the covariance matrix using the maximum likelihood procedure of SpssAmos 16. The fit statistics of model; χ^2 = 2012.427, df = 1061 and P$_{Value}$ =.000; goodness- of-fit index [GFI] =0.814;

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comparative fit index [CFI] = 0.887; root mean square error of approximation (RMSEA) = .066; correspond reasonably well with those found in the literature.

Table 2. Scale means, reliability, and inter-scale correlations.

	α	Mean	A	B	C	D	E	F	G	H	I	J	K	L
A. Efficacy	.721	3.901	.486											
B. Optimism	.701	3.830	.126	.685										
C. Hope	.728	3.985	.225	.254	.594									
D. Resiliency	.743	3.704	.151	.158	.264	.605								
E. Competence	.800	3.851	.184	.133	.236	.211	.495							
F. Learning	.879	4.100	.136	.086	.267	.109	.273	.564						
G. Risk	.843	3.411	.112	-.034	.065	.220	.110	.106	1.157					
H. Strain	.808	3.180	-.137	-.168	-.078	-.074	-.157	-.075	-.243	.870				
I. Anticipation	.755	2.725	-.042	-.047	-.064	-.004	-.100	-.094	.333	.157	.698			
J. Covering	.706	2.626	-.044	.083	-.056	-.016	.000	-.032	.166	.045	.278	.734		
K. Communication	.804	4.060	.077	.127	.166	.180	.213	.191	-.039	-.026	-.150	-.209	.644	
L. Thinking	.895	4.211	.184	.079	.217	.196	.289	.264	.066	-.089	-.108	-.063	.328	.540

Structural Equation Model

The research major hypothesis was tested and relatioships between constructs were modelling by using structural equation analyses (hereafter referred to as SEM) with the maximum likelihood estimation method using SpssAmos 16. Covariance matrices were analyzed in all cases using Amos. In this model, Self-efficacy, Optimism, Hope, Resiliency, Error Competence, Learning from Errors, Error Risk-Taking, Error Strain, Error Anticipation, Covering Up Errors, Error Communication, and Thinking about Errors are treated as exogenous variables and PsyCap and mistake management are treated as endogenous varaiable. Table 2 show the Summary statistics and covariance matrix of model exogenous variables.

The general conclusion was that the theorized model was a good fit to the data. As the fit indices— χ^2= 57.694, df= 26, CFI=.930, GFI=.943, NFI=.882, AGFI=.901, RMR=.029, and RMSEA=.077 —we conclude that the fit is acceptable. Fig. 2 shows the overall SEM results with each standardized theoretical path coefficient.

According to relationships of variables in the final fitted model, all dimensions of MMC except three of them had significant Standardized Regression Weights at 99% confidence interval [P_{Value}<.000]. But the coefficient of Error Risk-Taking [P_{Value}=.100, C.R.[3] = 1.646] and Covering up Errors [P_{Value}=.068, C.R. = -1.827] were not significant, significant at 5% level. In our research setting, Although Error Strain had significant weight in regression equation [P_{Value}=.003, C.R. = -

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[3] Critical ratio for regression weight

3.007], but its existence dismiss model from acceptable fitness boundary. Then, the coefficient of this variable was ignored in our inductive analysis.
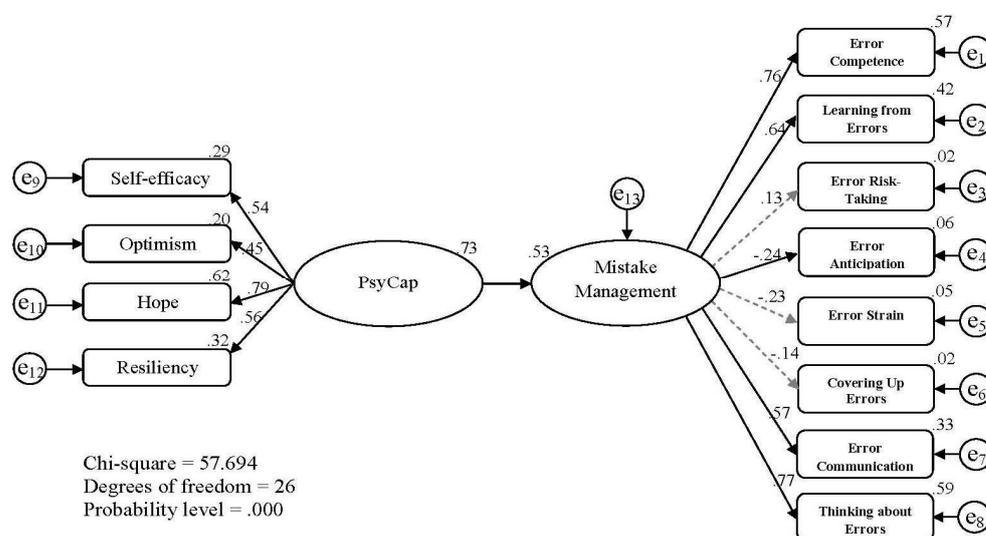

Fig.2. Results of structure equation modeling

Major hypothesis (H_{Major}) predicted that PsyCap would be positively impacted to broadcast MMC. As observed in structure equation (Fig. 2), this hypothesis was fully supported as PsyCap was significantly impact on MMC ($\beta = .73$, $p < .05$). Therefore, when an organization such as hospital had enjoyed from high level of PsyCap, we would expect to see high MMC.

Minor hypotheses test

In order to survey the relationships between independent and dependent variables of research minor hypotheses, we used multiple linear regression analysis by SpssAmos 16, Error and confidence interval was respectively 5% and 95%. Table 3 show these statistical procedure and significance of F_{ANOVA} for regression equation.

Table 3. Results of minor hypothesis tests

Regression equation	F (ANOVA)	Sig.	R^2	Result
MMC = 2.222 + .098 × efficacy + NS × optimism + .187 × hope + 0124 × resilience	19.860	.000	.282	H_1, H_3, and $H_4 \rightarrow$ Supported $H_2 \rightarrow$ Rejected
Notes: NS = not statistically significant at $p \leq 0.05$				

According to what is shown in table .3, the result of ANOVA test to survey being Linearity regression model is in significant level ($P_{Value} \leq .000$). Thus, linear regression model is fitted at .05 significant levels.

The results of this first analysis suggest that MMC is a function of self-efficacy ($t_{Value}=2.278$, sig. $=.024$), therefore first hypothesis (H_1) was supported. Hope ($t_{Value}=4.286$, sig. $=.000$) and resilience

(t_{Value}=3.182, sig. =.002) also contribute to MMC, then third and fourth hypothesizes (H_3 & H_4) were supported too. Interestingly, we did not find a statistically significant relationship between optimism and MMC, then second hypothesis (H_2) was rejected; All significances were at .05 levels. With regarding to standardized coefficients (β) of regression equation, hope (β = .318) has the most effectiveness on MMC between self-efficacy (β = .151) and resilience (β = .213) nevertheless coefficient of determination (R^2) of these three constructs reveals that they only have 28% role in formation of MMC in the research setting and others will be factors that not considered.

Discussion and Conclusion

According to importance of broadcasting culture of mistake management in organizations particularly in safety critical organizations such as hospital, one of the most important factors that is seem to have effect on MMC is PsyCap of that organization. Then, in this research, we pay to test this assumption until help managers to invest on PsyCap of their organization and increase culture of mistake management. In this order, the results of this study offer a number of implications for theory and practice.

First; we found that MMC become index by capability to deal with mistake immediately (error competence), learning from error, be aware from error (error anticipation), error communication as van Dyck (2009, p. 31) said that communication about errors and analysis of the underlying causes are regarded important for all, because they allow the development of shared knowledge, and analytical thinking about errors. As result revealed, error risk taking, error strain and covering up error didn't have any significant relationships with MMC.

Further; according to Harteis & et.al (2008, p.230) succeeding and failing attempts of learning from mistakes are based upon the interrelation of personal and organizational contributions. These contributions can be provided base on this point that having a favorite level of PsyCap totality and in framework of its dimensions (e.g. self-efficacy, hope, and resilience) can provide situation that personnel can handle occurred mistakes in order to learn from them, improve their performance in workplace, and subsequent create ascendancy of their organization. Also, although effect of optimism was not significant on MMC, but it is considered that this effect is latent in concept of PsyCap as illustrated in structural model (Fig. 2). Then, we should be expected that everyone pursuit to have efficacy for him/herself, everyone drive individuals experience to attain a goal by providing positive motivational state of the sense of success, and everyone has a positive reaction or adaptation in the face of risk or adversity and refers to the individual tendency to sustain and

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bounce back and even beyond when beset by problems and adversity can be a potential agent for developing and maintaining MMC in organization.

Limitations and Directions for Future Research

This research focuses on the state-like components of psychological factors of people, that is, PsyCap. Incorporating trait-like components such as psychological hardiness, personality of personnel will provide further insights into the role of psychological aspects of people in their effort for broadcasting MMC. This is also an appropriate area for future research.

Because subject of this research has been considered for first time, only it was surveyed in one industry, and only four hospitals accepted to participate in research procedure, it need to accomplish subsequent research in other industries or similar industry or other treatment personnel than nurse until invigorate our hypothesizes.

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