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# An empirical study of golfer group atmosphere, psychological contract and knowledge sharing

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According to the existing research, knowledge sharing can enhance interest and promote participation. This article aims to explore the relationship between golfer group atmosphere and knowledge sharing from the perspective of psychological contract. It adopts transactional contract and relational contract theories, two dimensions of psychological contract, as intermediary variables. The Analysis of Moment Structures (AMOS) tools, exploratory factor analysis and regression analysis are also involved to explore the relationship in Shenzhen golfer group. The conclusion is that the deeper emotion has been established among golfer group members, the more intense relational contracts will be found, and the easier knowledge sharing will be implemented. Besides, the more the members feel psychological reciprocal in the trade, the more mutual trust will be established, which can inspire more knowledge sharing behavior. This also indicates that the enhancement of transactional contract and relational contract will be able to promote Knowledge Sharing among members in leisure and sports groups.

Keywords: Golfer Group Atmosphere; Psychological Contract; Knowledge Sharing

### INTRODUCTION

Most members in a group are afraid to share knowledge (especially the long-accumulated experience) with others for fear of losing a unique competitive advantage. Currently people regard their knowledge as their own private property that they are reluctant to share with others. Renzal (2006), found out higher concern level has more negative impact on knowledge sharing behavior. This kind of phenomenon has aroused scholars' concern. Nowadays, some scholars are focusing on the factors and mechanism of knowledge sharing in organized commercial groups from multiple perspectives. However, it seems that some research on the non-commercial organizations as been ignored, especially the research from the perspective of group atmosphere. Therefore, this article tends to investigate the knowledge sharing behavior in Golfer Groups based on the theory of Group Atmosphere.

Effective knowledge sharing may enhance competitive

capabilities and respond better to business opportunities (Pingfeng, 2011). Knowledge sharing is a process that individual organization pass knowledge the or (professional knowledge, skills, experience, values, etc.) owned by itself, to the other individual or organization through the appropriate choices of ways, and be able to make these knowledge refreshed in an order of the original or new form (Riege, 2005). It is not only a simple way of sharing information, but the one where individuals are willing to help others to develop new skills. This process contains an inherent desire to share and teach. Most scholars have done researches on knowledge sharing among both formal organizations and the informal ones. It is said that the differences between inter-individual formal and informal knowledge is the purely shared private nature, separate from the organizational structure, policies and formal cooperation (Allen, 1977). The informal sharing mainly occurs among the people who get together because of common interest, and the informal network they constitute is the main channel of private access to knowledge and the proposals (Hippel, 1987); that means one of the basic characteristics of informal knowledge sharing lies in

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interpersonal relationship rather than the system of organization (Bouty, 2000). Firms can obtain competitive advantages from their employees' knowledge sharing behaviors. To achieve this goal, the enterprise can build knowledge management systems (KMS), to create organizational climate and attitude (Shiuann-Shuoh et al., 2012). Such psychological factors as cultural characteristics. individual characteristics and interpersonal team relationship also have an influence on the knowledge sharing (Sheng and Raymond, 2010). It can be concluded from the existing research that most scholars pay attention to the process, elements and driving mechanism of knowledge sharing behavior with few based on the psychological contract.

The psychological contract exists among members of the organization and has an influence on them at any given time, such as work environment, a sense of belonging, value recognition, development opportunities 1980). It is an individual subjective understanding of exchanged obligations in relationship with each other on both sides. Most of the psychological contract is implicit, informal, but also with the perception of nature and individualized (Rousseau et al., 1998). Employee's psychological contract established an important significance on attitude toward work and corporate reputation and evaluation (Matthijs et al., 2008; Kate et al., 2009), which also has an influence on knowledge sharing in Business Corporation and can be divided into two dimensions, which are exchange-traded contracts and relational contracts (Macneil, 1985; Robinson et al., 1994). These two factors can also be confirmed as "transactional contract" and "relational contracts" (Millward et al., 1998). The contractual relationship is based on the social exchange theory, called "transactional contracts", whose concern is concreted and short-term. Only when the consistent is the same as expected will the transactions be strengthened. These exchanges are not limited to the substances, it may be psychological wealth (such as enjoyment, spiritual support, etc.), as well as social wealth (such as access to identity, status, prestige, etc.). Psychological contract is the basis to motivate staff under transaction contract (Chen et al., 2009). Relational contract is a contractual relationship based on socioemotional exchange which is always long-term. Employees use long-term work and loyalty in exchange for long-term job security organizations, known as the "relational contract". The relationships are the linkages formed in the transaction between people (Melvin, 1999). Transactional psychological contract, taking noneconomic trading environment into account, relational contract emphasize the socio-emotional exchange relationship.

It is proposed that personal lack of relevant motor skills and sports knowledge has become one of the inherent constraints involved in leisure activities, indicating that leisure sports knowledge sharing among group members is one of the key factors which can enhance the interest of residents in sport and promote participation (Duane et al., 1991). Consequently it is necessary to study the ways to enhance the knowledge sharing in the community environment of physical members before studying the participation. Knowledge sharing research mainly focuses on the business environment of the formal organizations and informal organizations. In order to reflect the characteristics of leisure sports groups more precisely, this study will be carried out under atmosphere of golf groups. Most researchers use the two dimensions to reflect psychological contract in literatures, which can be introduced and applied to the study of sports groups. Therefore, this research chose the golfer groups as research objects in order to learn the relationship between group atmosphere and knowledge sharing in golfing group members. From the perspective of psychological contract, it aims to guide group members to share knowledge in a better way and make improvement of the level of participation in recreational sports. To make this research more convenient, the psychological contract among members has also been measured, defined as transactional contract and relational contract.

#### **HYPOTHETICAL MODELS**

Base on their interest and ability, people's participation in golf sport is free, showing a strong tendency of individuals, randomness, voluntarily and other features (Huizinga, 1996; Wang and Zhang, 2009). Golf group refers to a combination of spontaneous formation and structure that golfers treat the golf sport as a hobby (Wang, 2005). According to Litwin and Stringer (1968), organizational climate is the group member's perception of a specific environment, which can be gained directly or indirectly. The atmosphere can affect the organization motivation, attitudes, beliefs and values of members. Atmosphere, which means a set of measurable attributes directly or indirectly perceived by people, has an important influence on human behavior. atmosphere is an atmosphere or the environment which can be perceived and identified by members. Golfer group atmosphere is a kind of atmosphere in which golf group members have constant exchanges and interaction with each other. A few figures of golfing community atmosphere are as follow: first of all, group member has a good demonstration effect and leading function (Jeffrey, 2000); Secondly, through internal competition, it will increase the fun and enhance people's activeness and continuing participation in the golf sport activity (Hemmingway, 1998); Thirdly, the process communication enables golf group members to build mutual trust and form a psychological basis on which members can have cooperation with each other (Zhouyu, 2008); Fourthly, group activity is the basis of shared values, which facilitates the exchange of experience and

establishes a culture of learning among the group (Marianne and Torbjorn, 2009). Finally, golf groups exists with the free, easy, healthy and positive environment, people pay attention to the experience of participatory processes and psychological satisfaction (John, 2000).

According to the literature review above, this paper presents the underlying assumptions.

H1- golfer group atmosphere is correlated with knowledge sharing: Huber (2001), thought that social and psychological factors will affect employees' knowledge sharing behavior. Organizational climate is an important drive in the process of knowledge sharing (Farh et al., 2004). According to Litwin and Stringer (1968), the group atmosphere can directly or indirectly affect people's behavior, based on the basic assumptions that golf community atmosphere can facilitate the exchange of learning experiences among group members. Thereby, Hypothesis 1 is proposed.

Group atmosphere is an atmosphere or the environment which can be perceived and identified by members. Because the psychological contract is based on expectation, Kotter (1973), put forward that psychological contract is a kind of implicit contract with which individuals want to specify the pay and the return. Based on this, Hypothesis 2 is proposed.

**H2-** golfer group atmosphere has a correlation with the transactional contract: Group members form a psychological atmosphere, not only to enhance mutual exchanges and cooperation between members, but also strengthen mutual feelings. Based on this, Hypothesis 3 is proposed.

H3- golfer group atmosphere is correlated with relational contract: The economic perspective in knowledge sharing is influenced by the assumption that most people are self-interested individuals in classical economics, and the balance between the sharing of costs and expected benefits tradeoff is the key to personal decision for knowledge sharing. Only when the return is consistent with expectation will the transactions be strengthened. In the non-economic transactions, both parties can develop trust and maintain good relations. Based on this, Hypothesis 4 is proposed.

**H4-** transactional contract is correlated with knowledge sharing: Relational contract is a contractual relationship based on socio-emotional exchange. In the golfer groups, people exchange mutual feelings to enhance internal relationship in knowledge sharing between members. Based on this, Hypothesis 5 is proposed.

**H5-** relational contract is correlated with knowledge sharing: This paper tends to study that psychological contract has inherent logic of association with knowledge

sharing. The two factors of psychological contract has been introduced, namely the transactional contract and relational contract as two intermediate variables, It takes golfer groups as empirical study object to explore the influence and mechanism the atmosphere of golfer community members have to the group knowledge sharing behavior, and the research conceptual model is built as below (Figure 1).

#### **METHODS**

# Questionnaire design

Transactional contract indicates the approval of the other party's confidence in performance, which is based on the honesty of the parties to form psychological expectations and relationship of trust. Costa (2003), indicates that the trust is not only a psychological state built on other people's expectations and intentions, but also a feeling in behavioral tendencies on the performance. Exchange is not limited to material wealth, but may also be psychological wealth and social wealth. This research extracts 12 exchange-traded contract measurement items, which are 1) the trust-enhanced communication skills with group members; 2) reciprocity in dealing with group members; 3) I am willing to pay for inviting community members to give me advice; 4) exchange of information among members met my expectations; 5) intercommunication with community members can improve my social status; 6) share experiences with members will get the appreciation of friends, etc.

Relational contract is a contract based on socioemotion. Interpersonal communication enhances the mutual feelings while the exchange and transfer of knowledge is based on emotional investment. This article combines the features of golf community and then summarizes 12 questions measuring items, including 1) my passion to participate in the activities of group members, 2) group members' behavior affects me, 3) I'm treated with respect in the group, 4) I trust the group, 5) the information exchange is easy among group members, 6) it is easy for me to integrate into the community, 7) I am willing to participate in group activities among the leisure time, 8) to pay more for the group, 9) it is easy to promote friendship with the other group members, etc.

This article extracts five questions of measuring knowledge sharing behavior, in accordance with Sange's (1997), view that the structural dimension of knowledge sharing includes three aspects, they are sharing personal knowledge, sharing learning opportunities and encouraging others to study. Combined with the opinions of Yang (2008), the knowledge sharing behavior can be classified as sharing knowledge and resources with colleagues, actively provide recommendations to the team (department) or the executives and so on. Combined with the characteristics of golf, five measuring

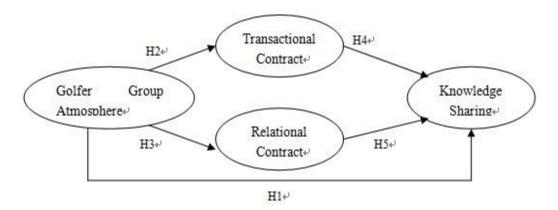


Figure 1. Conceptual Model

questions are developed, including the sharing of personal knowledge or skills, exchange of experiences and feelings with members, share training and learning opportunities, to help others acquire knowledge, to encourage members to learn and upgrade, etc.

To make this measurement of each latent variable more accurate, Likert7 scale (1 = strongly disagree, 7 = strongly agree) can be used as a tool. The 7 measure index of Golfer Group Atmosphere is adopted from the study questionnaire made by Fen and Guang (2006) and Chennamaneni (2007). Combined with the features and connotations of atmosphere of golf community, this questionnaire develops other indicators such as the demonstration effect in group members, fun in group activities, psychological fit between members, shared values, and the experience of participants.

#### **Data collection**

The formal research concentrates in six golf driving ranges and four golf courses in city of Shenzhen, China. A total of 800 questionnaires are sent and 735 are recovered, in which 642 valid questionnaires are checked, with an effective rate of 80.25%. In the survey sample, women hold 47.2% while men occupy 52.8%; 14.2% of them are below 18 years old, 19% are between 18-30 years, respondents between 31-45 years old accounted for 29%, 34% of them are between 46-60 years old, and 3.9% are older than 60; 66.3% of respondents have a university degree or above; therefore the majority of them can accurately understand the questionnaire.

# **Data Analysis**

Shenzhen City golf groups are regarded as the research object in this empirical study. In this research, 110

Shenzhen Golf enthusiasts are launched in the preinvestigation, and the method of exploratory factor analysis is used to the selection and the establishment of the composition of each latent variable factor. In this article, SPSS software is used for the factor analysis. It selects factors whose Eigen values are more than 1, rotates them by principal component analysis with a maximum variance method to output the rotated principal component matrix. In order to obtain a theoretical factor structure, the following three standards are used to filter the appropriate measure variables: first, the load of the variable factor is at a minimum of 0.5; second, variables have a very low cross-load relationship with other variables; third, the content of a variable factor must carry the same connotation with the other measure variables. Only to meet at least one of the above three criteria will the variable be retained. Finally, the extracted factors will be named according to the results of theoretical analysis and factor analysis.

Based on the selection principles above, a total of 24 measuring items matches this standard, and are reserved to constitute the questionnaire of the relationship between golfer community atmosphere and the members knowledge sharing. In the questionnaire, there are five questions about golfer community atmosphere, nine about the trust measurement in transactional contract, six about the emotion measurement in relational contracts and four about knowledge sharing. Details can be seen in Table 1.

#### Results

# Reliability and Validity

Cronbach <sup>r</sup> of this total scale of measurement is 0.901, higher than 0.80; and the value of KMO is also higher than 0.80, indicating that measurement scale is reliable with good validity (See table 2).

Table1. Summary of the measuring items

	No.	Items			
Golfer	A1	The demonstration effect in group members			
Group	A2	Fun in group activities			
Atmosphere	А3	Psychological fit between members			
	A4	Shared values			
	A5	The experience of participation			
Transaction	B1	The trust enhanced communication skills among group members			
al Contract	B2	Reciprocity in dealing with group members			
	В3	Build mutual trust when communicating with others in golf community			
	B5	Sharing golf knowledge with members makes me happy			
	B6	Exchange of information among members meets my expectations			
	B7	Sharing experiences with members gets me the appreciation			
	B8	Teaching does not mean losing my advantage			
	B9	Communication benefits me a lot			
	B11	Group members are responsible for fulfilling commitments			
Relational	C1	Pay attention to the member's behavior			
Contract	C2	Inter-respect among members			
	C4	I am willing to spent more time communicating in the group			
	C6	It is easy for me to integrate into the community			
	C10	I am willing to participate in group activities within the leisure time			
	C11	It is easy to promote friendship with the other group members			
Knowledge	D1	The sharing of personal knowledge or skills			
Sharing	D2	Exchange of experiences and feelings with members			
	D3	Share training and learning opportunities			
	D5	Help others to acquire knowledge			

Note: those items which not meet the standards have been excluded

Table 2. KMO and Bartlett's test of sphericity

Kaiser-Meyer-OlkinSampling adequacy measure		.903
	Approximate chi-square distribution	7245.143
Bartlett test of sphericity	Freedom	276
	Significance	.000

# Measurement model and the structural model fit analysis

In the analysis of this structural model, the 2/df of each measurement model is less than 3, and GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index), NFI (Normed Fit Index), TLI (Tucker-Lewis Index), CFI (Compared Fit Index) are greater than 0.85, the RMSEA's (Root Mean Square Error of Approximation) value is less than 0.08 (details in Table 3), indicating that the measurement model is acceptable.

# **Hypothesis tests**

Figure 2 shows the result of structural equation model analysis, and the Table 4 shows the Regression coefficient in hypothetical model. The path coefficients

between latent variables are standardized coefficient. The relationship coefficient between golfer group atmosphere and knowledge sharing ( =0.14) proved that H1 is correct. The coefficient between golfer group atmosphere and transactional contrast ( =0.33) proved that H2 is correct. The coefficient between golfer group atmosphere and relational contrast ( =0.44) proved that H3 is correct. The coefficient between transactional contrast and knowledge sharing ( =0.15) proved that H4 is correct. The coefficient between relational contrast and knowledge sharing ( =0.38) proved that H5 is correct.

# **Discussions**

As it is shown in Figure 2, every variable is interpreted by several items, which is showed separately. The numbers between indexes and items are the comparative

Table3. Model fit index

index	Recommended value	Actual value
2	The smaller the better	714.9
df		239
<sup>2</sup> / df	<3	2.9
RMSEA	<0.08	0. 055
GFI	>0.9	0.914
AGFI	>0.8	0.892
NFI	>0.9	0.866
TLI	>0.9	0.892
CFI	>0.9	0.906

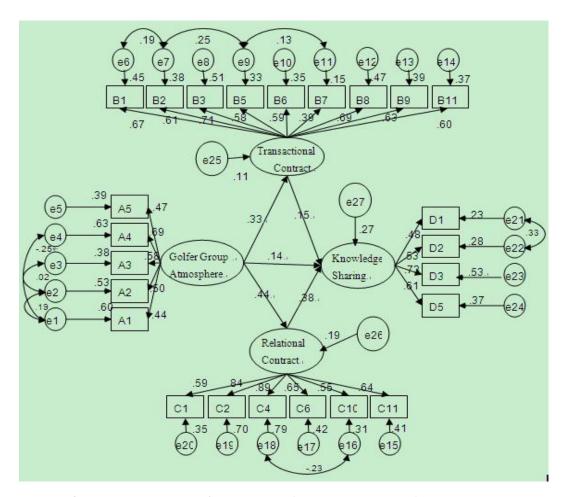


Figure 2. Standardized Regression Coefficient Path (Note :e stands for error).

contribution rates. The regression indexes are marked between variables based on the structural equation model analysis. P in Table 4 is short for the possibility of prominence. P <0.05 means no accepted assumptions. The data analysis above shows that:

 Golfer group atmosphere has a direct positive impact on members' knowledge sharing (=0.14\*). The two observed variables, the demonstration effect (=0.44) and shared values (=0.69) of golf group members, have an obvious positive role in guiding knowledge sharing among members. Golfer group atmosphere, to some extent, can promote knowledge sharing among members.

Table 4. Theoretical model regression coefficients

	Non-standardized parameter estimates	Standard error	T value	Р	Standardized parameter estimates
Transactional contract < Groups Atmosphere	.366	.059	6.202	***	.331
Relational contract < Groups' Atmosphere	.577	.074	7.825	***	.440
Knowledge Sharing< Transactional contract	.101	.035	2.883	.0 04	.154
Knowledge Sharing< Relational contract	.209	.036	5.838	***	.378
Knowledge Sharing< Groups' Atmosphere	.104	.045	2.305	.0 21	.144

Note: P=0.00, \*\*\*;0.00< P <0.01, \*\*; 0.01< P <0.05, \*.

- Golfer group atmosphere has a significant positive correlation with the transactional contract ( = 0.33 \*\*\*). In order to strengthen the transactional contract, golfers can take some actions to improve the group atmosphere. These actions include to make psychological fit between members( =0.58) and share the participation experience( =0.47).
- Golfer group atmosphere positively affects the relational contract (= 0.44 \*\*\*). It is stated that the relational contracts strengthen the golf proactive and positive relations among group members and thus significantly facilitated knowledge sharing among members.
- Transactional contract has a significant positive effect on knowledge sharing ( = 0.15 \*\*). With transactional contract as an intermediary role, golfer group atmosphere enhances mutual trust (=0.71) between the group members and produces a more essential impact on the knowledge share of members. Transactional contract is regarded as a bridge through which golf group members may share their knowledge and experience under conditions of reciprocity( =0.61).
- Relational contract positively affects the knowledge sharing ( = 0.38 \*\*\*). With relational contract as an intermediary role, golfer group atmosphere enhances inter-respect ( =0.84) with each other. What is more, the increasing number of members are willing to spent much time on communication ( =0.89).

# **Conclusions**

Under the golfer community atmosphere scenario, this study discusses the affect that two dimensions of psychological contract have on the knowledge sharing of golf group members. In conclusion, the golfer group

atmosphere affects knowledge sharing to a certain extent. The result shows that on one hand, fun and shared values in the group can directly encouraged the knowledge. On the other hand, group atmosphere may indirectly lead knowledge sharing by its content and form of group activities among group members, such as the demonstration effect of other group members. In order to enlarge knowledge sharing among group, members should share more values in the group, rather than just rely on the demonstration effect.

The transactional contract of golf groups also has a significant effect on knowledge sharing. Knowledge sharing among group members is not gratuitous, although most of them are non-economic transactions. People consider the advantages and disadvantages of knowledge sharing psychologically. The more reciprocal in trade that the members feel in psychology, the more you get to enhance mutual trust between members, in order to inspire the knowledge sharing behavior among members. In order to achieve more knowledge sharing behavior, members should build mutual trust with each other, share golf knowledge and experience.In the environment of recreational sport groups, the relational contract in the two dimensions has a more significant influence on knowledge sharing than transactional contract. The lack of psychological contract with each other should be avoided because the lack of communication can diminish the relational contract. Therefore, in order to facilitate the knowledge sharing behavior among members, it is suggested that the group members should participate in group activities, which enhanced friendship and establish mutual trust. Paying attention to members' behavior and inter-respect are also recommended.

# **REFERENCES**

Allen T (1977). Management the technology flow [M].Cambridge, MA: MIT Press.

- Bouty I (2000). Interpersonal and interaction influences on informal resource exchanges between R&D and researcher across organizational boundaries. Acad. Manage. J. 43(1): 50-65.
- Chen H, Qi H, Long R-y (2009). Content and structure of China coal mine operators' psychological contract. Procedia Earth. Planetary Sci. 2(1): 1617-1626.
- Chennamaneni A (2007). Determinants of knowledge sharing behaviors: developing and testing an integrated theoretical model [EB/OL]. <a href="http://dspace.uta.edu/bitstream/handle/10106/305/umi-uta-1600.pdf?sequence=1">http://dspace.uta.edu/bitstream/handle/10106/305/umi-uta-1600.pdf?sequence=1</a>, 2007-10-26.
- Costa AC (2003). Work Team Trust and Effectiveness. Personal Rev. 32(5): 605- 622.
- Duane W, Crawford E, Jackson L, Geoffrey G (1991). A hierarchical model of leisure constraints. Leisure Sci. 13(4): 309-320.
- Farh J, Zhong C, Organ D (2004). Organizational citizenship behavior in the People's Republic of China. Organization Sci. 15(2): 241-260.
- Fen LH, Guang LG (2006). Effects of socio-technical factors on organizational intention to encourage knowledge sharing. Manage. Decis. 44(1): 74-88.
- Hippel V (1987). Cooperation between rivals: informal know-how trading. Res. Policy. 16: 291-302.
- Huber G (2001). Transfer of knowledge in knowledge management systems: unexplored issues and suggested studies. Eur. J. Info. Systems. 10: 72-79.
- Huizinga J (1996). Game people. China Academy of Fine Arts Publishing House, Beijing: 30.
- Jeffrey K (2000). Your life of leisure. People's Publishing House, Beijing: 9-15
- Hemmingway J (1998). Leisure and civility: Reflection and on a Greek Idal. Leisure Sci. 10(03): 131-142.
- John K (2000). Toward freedom. Yunnan People's Publishing House, Kunming.
- Kate J, McInnis J, Meyer P, Susan F (2009). Psychological contracts and their implications for commitment: A feature-based approach. J. Vocat. Behav. 74(2): 165-180.
- Kotter JP (1973). The psychological contract: Managing the joining-up process. California Manage. Rev. 15(3): 91-99.
- Litwin GH, Stringer RA (1968). Motivation and Organizational Climate. Boston arvard University.
- Marianne SB, Torbjorn T (2009). A longitudinal study of the relationship between leisure-time physical activity and depressed mood among adolescents. Original Res. Article Psychol. Sport.Exercise. 10(01): 25-34.
- Macneil IR (1985). Relational contract: what we do and do not know. Wis. L. Rev. 483.
- Melvin A (1999). Eisenberg. Why there is no law of relational contracts [D]. Northwestern University School of Law.
- Millward LJ, Hopkins LJ (1998). Psychological contracts, organizational and job commitment. J. Appl. Soc. Psychol. 28(16): 1530-1556.
- Pingfeng L (2011) Began Raahemi, Morad Benyoucef. Knowledge sharing in dynamic virtual enterprises: A socio-technological perspective. Knowledge-based Systems. 24(3): 427-443
- Matthijs PB, Annet H, De-Lange P, Jansen GW, Mandy EG, Van DV (2008). Psychological contract breach and job attitudes: A meta-analysis of age as a moderator. J. Vocat. Behav. 72(1): 143-158.
- Renzal B (2006). Trust in Management Sharing: the Mediating Effects Fear and Knowledge Document. The Intl. J. Manage. Sci. 6(5): 1-15.
- Riege A (2005). Three-Dozen Knowledge-Sharing Barriers Managers Must Consider. J. Knowledge Manage. 9(3): 18-35.
- Robinson SL, Kraatz MS, Rousseau DM (1994). Changing obligations and the psychological contract: A longitudinal study. Acad. Manage. J. 37(1): 137-152.
- Rousseau DM, Tijoriwala SA (1998). Assessing psychological contracts: issues alternatives and measures. J. Organizational Behav. (19): 679-695.
- Sange P (1997). Sharing Knowledge. Executive Excellence. 14(11): 17-18.
- Schein EH (1980). Organizational psychology. Prentice Hall. 3rd edition, Englewood Cliffs, NJ.
- Sheng W, Raymond AN (2010). Knowledge sharing: A review and directions for future research. Human Resource Manage. Rev. 20(2): 115-131.

- Shiuann-Shuoh C, Yu-Wei C, Pei-Yi C (2012). Behavioral intention formation in knowledge sharing: Examining the roles of KMS quality, KMS self-efficacy and organizational climate. Knowledge-Based Systems. 31:106-118.
- Wang ZC (2005). Speculative concept sports groups and informal sports groups sociological significance. Liaocheng University newspaper. 18(2): 72-75.
- Wang R, Zhang Q (2009). Chinese leisure sports researches. Physical Educ. 17(7): 91-97.
- Yang Y, Long J (2008). Employees' Knowledge Sharing Behavior Structure and Measurement [J]. Psychol. Newspaper. 40(3): 350-357. Zhouyu J (2008). Talking about sports groups in the community cohesion. Physical Educ. 16(5): 17-20.