



## **Knowledge Hiding & Machiavellianism: An Empirical Analysis**

**Smita Pillai & Nina Muncherji**

*Institute of Management, Nirma University, Gujarat, India*

---

### **Abstract**

Knowledge sharing is widely being discussed and promoted in different organizations. There are different policies defined to encourage employees to disseminate knowledge amongst co-workers. However, it is being noticed that people intentionally hide information or knowledge in three ways i.e., by “Evasive hiding, Playing dumb or by Rationalized hiding (Zhao, Liu, & Xiaoyu, 2019).” As Mach personalities are considered as Dark personalities, they may try to hide knowledge intentionally. The methodology applied is descriptive. The purpose of the study is to understand and analyze the personality of B-School students as they are potential candidates for corporates and to know what kind of knowledge hiding behavior individuals are executing. The study has given interesting results which show that the relationship between Mach and Playing Dumb is insignificant, which is contrary to other studies. The sample size is not sufficiently large to generalize the proposition, so this limitation can be improved in future studies by introducing random sampling techniques instead of convenience and also targeting a bigger pool of homogenous groups. Why do corporates bring in the new and fresh potential? Some of the reasons are, to bring in fresh knowledge, spark, and energy and also to help organizations remain productive and creative. And if these individuals are going to hide knowledge rather than sharing it, then the investment in them will be a cost to the organization. Knowledge hiding research is gaining a lot of attention nowadays as the organization is focusing on fostering creativity and research on knowledge hiding with B-School students as the sample is not very common.

**Keywords:** Knowledge Hiding, Machiavellianism, Knowledge Sharing, Creativity, Trickle-down Effect

**JEL Classification:** M00, C91, D23

**Paper Classification:** Empirical Paper

---

### **Introduction**

Knowledge is defined as “Information that is more planned, combined or summarize to boost intellectual capacity, awareness or understanding” (Bergeron, 2003). Davenport and Prusak’s (1998) proposed a “Knowledge-Sharing formula: Share = pass + understand (absorb).” Knowledge sharing plays a vital role in building up the organization’s competitive edge and a firm’s organizational knowledge (Davenport & Prusak, 1998; Pangil & Nasurddin, 2013). Researchers have noticed that knowledge sharing is an indispensable function for an organization to be successful as it can improve ‘decision-making capabilities,’ ‘build learning organizations’ and encourage ‘cultural modification and innovation’ (Postolache, 2017). However, despite all



efforts from organizations to encourage sharing of knowledge among the peer and colleagues; there is a tendency found among employees to hide knowledge or withhold knowledge with themselves. This clarifies that knowledge hiding is not the antonym for knowledge sharing. Rather it is the intentional withholding of knowledge from someone who has requested for sharing of knowledge. Considering the agile environment, organizations have also tried to attach a reward system with knowledge sharing. More you share, more you will get points in the performance matrix (Huysman & de Wit, 2002; Šajeva, 2014). There is a lot of research on knowledge sharing and knowledge management by different authors (Lee, So, & Tang, 2000; Lin, 2007; Srivastava, Bartol, & Locke, 2006; Tangaraja, Rasdi, Ismail, & Samah, 2015), but there are very few studies on knowledge hiding. Some areas are still untouched. Certain studies have also highlighted certain shortcomings of knowledge hiding research, with different units of the sample and organizational setting, which has given the researcher a scope to explore the area of knowledge hiding with darker personality traits. This has given the authors a scope to explore the relationship between 'Machiavellianism' and 'Knowledge Hiding' further, among future Managers (B-School Students) (Men, et al., 2018).

## Conceptual Background

### Knowledge Management

Karl-Erik Sveiby is a Professor of Knowledge Management, and he is often known as the "founding father" of the Knowledge Management Concept.

Knowledge management is defined as 'the process of transforming information and intellectual assets into enduring value' (Kidwell, Vander Linde, & Johnson, 2000). Knowledge sharing can be referred to as the 'process of capturing knowledge or moving knowledge from a source unit to a recipient unit' (Bircham-Connolly, Corner, & Bowden, 2005). Knowledge Management construct is being proposed to achieve work-related outcomes such as improved performance through shared intelligence and higher levels of creativity and innovation in the organization (Mohayidin, Azirawani, Kamuriddin, & Idawati, 2007). It also helps in developing an organization's competitive advantages through improved skills in individuals to create values in the firm (Renzl, 2005). Knowledge management is a strategic move to advance and promote knowledge and ensuring to bring back individuals and employees from knowledge hiding behavior. In a research conducted in a Malaysian University, Knowledge management practices were supposed to be routine work by the lecturers and professors which has brought a significant improvement in the performance of delivering their core duties (Mohayidin, Azirawani, Kamuriddin, & Idawati, 2007). Tacit knowledge resides personally with the individual, and others can gain it only through interaction and sharing. Knowledge sharing has become a lawful and significant activity for organizational development and sustenance (Liu, 2008).

### Social Exchange Theory

Social Exchange theory is being studied in this research in a different context and its roots can be traced back to 1920s which has been a base for many disciplines like social psychology, anthropology, and sociology (Cropanzano & Mitchell, 2005). In this research paper, social exchange theory is looked upon as the 'exchange relationship' at work / organizational context. When we discuss relationships, it is about the interaction between associates. Associates can be individuals or an organization. This relationship can be operationalized with colleagues, co-workers, immediate supervisor or clients. Blau (1964) has identified trust as an important variable for a smooth social exchange relationship. Good trust among the individuals may help

in knowledge exchange and sharing of information. Social exchange theory also poses a condition by expecting something in return for sharing, which may be information in exchange for another piece of information. If this exchange is interrupted by one trying not to share, it may influence the relationship which has a long-term effect on future exchanges (Dodokh, 2019; Jha & Varkkey, 2018; Xiao & Cooke, 2018).

## Concept Misconception

Before moving to the Knowledge hiding construct, we need to completely understand the fundamentals of 'Knowledge Management' such as "Knowledge Sharing" and "Knowledge Hoarding" which cannot be ignored (Demirkasimoğlu, 2016). Husted and Michailova (2002), in their research, have pointed out that few people don't believe in sharing their knowledge as it has the risk of taking away the information by others and using it; while others saw the benefit in disseminating knowledge within an organization for the reason of getting acknowledgment for doing the same. As per the research by Peng (2013), 59% of Chinese workers have shown knowledge hiding behavior. People may actively or passively withhold the knowledge with them, this has also been pointed out by Connelly in her research. Connelly defined knowledge hiding as intentional or active attempt to hide knowledge (Connelly C. E., Zweig, Webster, & Trougakos, 2012). Despite all the measures taken by the management in organizations, knowledge sharing is considered as an exception, not compulsion. Davenport and Prusak (1998) have found in their research that the knowledge hoarding and guarding their knowledge is a natural phenomenon shown by human beings (Davenport & Prusak, 1998).

There is a lot of confusion between knowledge hoarding and knowledge hiding as it is very commonly interchangeably used. Knowledge Hoarding explains the accumulation of knowledge or gaining knowledge or can be said as updating knowledge to take the benefit of the same in the future. Knowledge Hiding is to hide or withhold knowledge and not sharing it with someone even when requested by another individual (Connelly C. E., Zweig, Webster, & Trougakos, 2011).

## Knowledge Hiding

Ford(2008) has identified three different constructs in a continuum: Knowledge Hoarding, Knowledge Sharing, and Knowledge Hiding to show disengagement behavior of an individual of not disseminating the knowledge actively (Ford, 2008). Extensive research on factors that lead to knowledge sharing had been done, but the construct of knowledge hiding remains relatively untouched. Connelly et al. (2012) explored knowledge hiding, and she and her associates have developed a scale to measure knowledge hiding. According to her research, when an individual is hiding knowledge, they are trying to execute few behaviors which can be classified as 'Evasive hiding,' 'Playing dumb' or 'Rationalized hiding' (Connelly et al., 2012).

Research has proved that knowledge hiding is a dyadic construct. According to social exchange theory, the organizations are governed by an unspoken social exchange between two individuals, so if knowledge hiding occurs between workers or co-workers, it may affect their relationship. It depends on how the individual with knowledge responds to the request. What generally hampers social exchange is the interpersonal distrust. Distrust can be explained as a lack of confidence in sharing information or as an intentional information distortion for personal gains. Various researches have given a cue that Trust helps to predict some behaviors like risk-taking, task performance, citizenship behavior and also knowledge sharing as explained by Blau in social exchange theory (Blau, 1964; Colquitt, Scott, & LePine, 2007). Distrust is also one of the predictors of knowledge hiding behavior (Labafil, 2017). A researcher has identified different

kinds of behavior displayed during the process of knowledge hiding. "The first, 'Playing Dumb,' occurs when employees pretend not to have the requested information." The second, 'Being Evasive' describes a situation in which an employee provides incorrect information or falsely promises to give a complete answer later." Employees taking the third approach 'Rationalized Hiding', "offer a justification for a balking, suggesting that they aren't allowed to provide the information or blaming another party" (Connelly, Zweig, Webster, & Trougakos, 2011; Connelly C. E., Zweig, Webster, & Trougakos, 2012).

In this study, we looked at knowledge hiding from an individual difference perspective. Mainly, we observed that there is some relationship between Machiavellianism and the knowledge hiding variable which we are testing on B-school students as our sample.

Richardson and Thepaut (2007) confirmed that 'individuals high on Machiavellianism increase their own benefits other than helping potential partners.' Employees those who are high Machiavellian will not let others individual control him/her. This dark personality has a desire for control; they can generally control the situation by keeping knowledge or information to themselves compared to low machiavellian. Low machiavellian are more trustworthy and honest (Pan, Zhou, & Zhang, 2016).

## Machiavellianism

'Machiavellianism' construct which is also known as Mach is named after the philosopher 'Niccolo Machiavelli.' "Machiavellianism is a trait that is characterized by the manipulative and exploitative attitude toward others, lack of empathy, and a cynical view of human nature." (Ináncsi, Lángb, & Bereczkeia, 2016). This construct was originally proposed by 'Christie and Geis' in their studies (Christie & Geis, 1970). Soon after, the construct was added and included in the studies of organizational behavior. Research has shown that Mach individual is Self-Centered, Manipulative, Cynical and Deceitful (Pan, Zhou, & Zhang, 2016).

Machiavellianism is a well-known construct in the organizational behavior area and there is a lot of research on this construct. Machiavellianism has been researched with several variables like leadership (Drory & Gluskinos, 1980), empathy (Andrew, Cooke, & Muncer, 2008), emotional intelligence, narcissism, and psychopathy (Paulhus & Williams, 2002). However, there is limited research showing there is a direct relationship between Machiavellianism and Knowledge hiding to prove that there is an intent by a Machiavelli to hide knowledge and not share the knowledge with other people. The Mach always believes in the philosophy that the end justifies the means. They manipulate things for their personal benefits. Employees with High Mach behavior regard their peers and co-workers to achieve their ends. Research on Machiavellianism has shown that the people with high Mach scores are categorized as lacking interpersonal affect component, low ideological commitment, reduced helping behavior and lack of gross psychopathology (Belschak, Den Hartog, Deanne, & De Hoogh, 2018). This theory of Machiavellianism was developed for the political leaders as they justify and fit the personality trait explained here (Silvesste, Wyatt, & Randall, 2014). They also undermine trust and cooperation, which was also seen in the knowledge hiding construct. There is an essence of distrust which blocks the information flow intentionally. It shows that the Mach people will not cooperate and share the knowledge when they are requested to do so which gives a strong reason to hypothesize the rational.

## Hypothesis

H1: There is a strong positive relationship between Machiavellianism and Knowledge Hiding

## The Rationale for the Sample

Knowledge Hiding construct has not been studied much and is unexplored in specific contexts. But it does prevail in organizations at a different level and does influence various organizational level and individual level outcomes (Jha & Varkkey, 2018). Machiavellianism and Knowledge Hiding relationship has been studied in very few contexts, and very limited researchers have focused on Management Students as the sample. The rationale for taking students as the sampling unit is that these students are going to be the future employees of the organizations. If these future managers continue with the knowledge hiding behavior, they cannot survive in organizations promoting creativity and innovation. Creative organizations focus on knowledge sharing not hiding. And research says that for some knowledge hiding may be situational, but the constant display of such behavior may lead to it over a period of time, becoming a personality trait.

## Research Methodology

### Objective

To study the relationship between 'Machiavellianism and Knowledge Hiding' construct through empirical investigation.

### Research Design

The research approach for this study is descriptive and empirical.

### Sample Design

The data were collected from 91 respondents who were Management Students at a reputed B-School. The sample for the study was collected through convenience sampling.

### Measures

#### Machiavellianism

A 20 item Mach-IV Scale developed by Christie & Geis (1970) was used to measure Machiavellianism. This questionnaire is a self-reported questionnaire for respondents on a 1 to 5 Likert scale (Where 1=Strongly Disagree and 5= Strongly Agree).

Sample items for Machiavellianism 'It is wise to flatter important people'.

#### Knowledge Hiding

Knowledge hiding was measured with a 12-Item scale which was adopted from studies of Connelly et al. (2012). The three dimensions of knowledge hiding were measured with four items for each of them. This questionnaire is a self-reported questionnaire for respondents on a 1 to 5 Likert scale (Where 1= Never and 5 =Always). A sample item for Evasive Hiding 'I agree to help him/her but never really intend to'. A sample item for Rationalised Hiding 'I explain that I would like to tell him/her but was not supposed to'. A sample item for Playing Dumb 'I pretend that I do not know the information'.

## Data Collection

Data was collected through a survey method, questionnaires were distributed to 170 respondents, out of which 120 respondents have responded, and 91 responses were considered for data analysis.

## Analysis

### Table A1: Correlation Test

Correlation is a statistical tool that helps in indicating the level to which two or more variables fluctuate with each other. The extent to which variables parallel increase or decrease is positive correlation whereas, the extent to which one variable increase while the other decreases is a negative correlation. In Table A1, the relationship between Playing Dumb and Mach Score is insignificant which is an interesting observation with students as a sampling unit.

| Pearson Correlation Matrix  |          |          |          |                    |
|---|----------|----------|----------|--------------------|
|   | EH score | PD score | RH Score | Overall Mach score |
| EH score  | 1        |          |          |                    |
| PD score  | .456**   | 1        |          |                    |
| RH score  | .417**   | .488**   | 1        |                    |
| Overall Mach score  | .207*    | .192     | .262*    | 1                  |
| **. Correlation is significant at the 0.01 level (2-tailed).<br>*. Correlation is significant at the 0.05 level (2-tailed).<br>EH-Evasive Hiding, PD-Playing Dumb, RH-Rationalized Hiding |          |          |          |                    |

Source: Created by the author using SPSS version 20

### Case Processing Summary

|       |          | N   | %     |
|-------|----------|-----|-------|
| Cases | Valid    | 91  | 55.5  |
|       | Excluded | 73  | 44.5  |
|       | Total    | 164 | 100.0 |

- a. Listwise deletion based on all variables in the procedure.

This shows the missing data not used/Considered by SPSS for analysis because of their missing values.

### Table A2: Reliability Test: Machiavellianism Scale

The reliability test shows the same results under consistent conditions. Higher the reliability scores the better.

#### Reliability Statistics

| Cronbach's Alpha | No. of Items |
|------------------|--------------|
| .505             | 20           |

Source: Created by the author using SPSS version 20

**Table A3: Reliability Test: Knowledge Hiding Scale**

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .813             | 12         |

Source: Created by the author using SPSS version 20

**Table A4: Regression Analysis**

Regression Analysis is the set of statistical processes for estimating the relationship between dependent and independent variables.

**Model Summary**

| Model  | R     | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|--|-------|----------|-------------------|----------------------------|---------------|
| 1  | .279a | .078     | .067              | .3780614                   | 1.679         |
| a. Predictors: (Constant), Overall Mach score<br>b. Dependent Variable: Overall KH Score |       |          |                   |                            |               |

Source: Created by the author using SPSS version 20

In Table A4, the value of R is 0.279 and R-square is 0.78 which shows that 78% of the variation in Mach score is explained by the Knowledge Hiding variable. This value of R is low compared to other studies in knowledge hiding, however, it may improve with the increase in sample size.

**Table A5: ANOVA**

**ANOVA**

|  | Model      | Sum of Squares | Df | Mean Square | F     | Sig.  |
|--|------------|----------------|----|-------------|-------|-------|
| 1  | Regression | 1.070          | 1  | 1.070       | 7.486 | .008a |
|  | Residual   | 12.721         | 89 | .143        |       |       |
|  | Total      | 13.791         | 90 |             |       |       |
| a. Predictors: (Constant), Overall Mach score<br>b. Dependent Variable: Overall KH Score |            |                |    |             |       |       |

Source: Created by the author using SPSS version 20

The P-value 0.008 is less than 0.05 thus H1 is Accepted. This means there is a significant positive relation between Machiavellianism and Knowledge Hiding. Thus, the individuals, with Machiavellianism as a trait increases the chances of an individual's knowledge hiding behavior.

**Table A6: Descriptive Statistics**

| Descriptive Statistics |    |      |
|------------------------|----|------|
|                        | N  | Mean |
| Evasive Hiding         | 91 | 2.05 |
| Playing Dumb           | 91 | 2.22 |
| Rationalized Hiding    | 91 | 2.68 |
| Mach Score             | 91 | 2.87 |

Source: Created by the author using SPSS version 20

## Descriptive Statistics

Table A6 shows the Mean of the total MACH-IV score is 2.87. The mean of the Evasive Hiding score is 2.05, Playing Dumb is 2.22, and Rationalized Hiding is 2.68. All the mean scores are less than 3. Most of them were low on Evasive Hiding and Playing dumb behavior. But the scores of Rationalized hiding and Mach are close to 3 which show that there are people who try to rationally hide information and there are people also who are Machiavellians in nature who look at only their own good or benefits. These scores are likely to improve with the increase in sample size.

## Discussion

There is extensive literature showing that knowledge sharing leads to higher company performance, provided there is a conducive culture supporting the same. An individual's willingness to share knowledge is an essence of knowledge creation to promote company performance (Kucharska & Wildowicz-Giegiel, 2017) and the importance of organizational support. Research shows that Mach behavior/scores can be improved by cognitive behavior therapy. But the complication here may be that individuals will not openly agree that he/she is a machiavellian person. These personalities are to be handled tactfully without hurting their ego and helping them to change. As these individuals are more self-centric and are always looking for gaining importance from the people around, they can be asked to conduct workshops and seminars which may help them to gain acknowledgment as an expert, and it can also become a way these people can be forced to share knowledge. This study provides some interesting findings. The relationship between Mach and Playing dumb was found to be insignificant (Table A1) which should have been the other way round. Playing Dumb is supposed to harm relationship which may be the reason B school students look other ways to hide knowledge. Other research papers have reported a significant relationship (Pan, Zhou, & Zhang, 2016), the reason for this could be the nature of the sample (B-School Students). The students going through the same curriculum would know that Playing Dumb would not be possible as a reason for hiding knowledge as they need to exchange favor at some point in time when studying together. But if we look at the Rationalized hiding and Evasive hiding relation with Machiavellianism score it is significant to show that how these mature individuals politically manipulate the information or not share the information by putting blames on others. Table A4 shows that there is a positive relationship between Machiavellianism and Knowledge Hiding which means higher the Mach score the higher the chances of the individual hiding information.

## Managerial Implications

Human Resource Practices need to be very efficient and robust to deal with the Machiavellianism personality trait. As per the previous research, Machiavellian behavior has led to decreased job satisfaction, higher turnover, Lower Citizenship behavior, and work cynicism (Sakalaki, Richardson, & Thepaut, 2007). Recruiters can be careful when they are recruiting potential candidates, as those who are high on knowledge hiding may be spoiling the company's culture (Pan, Zhou, & Zhang, 2016). Why do corporates bring in the new and fresh potential? Some of the reasons are, to bring in fresh knowledge, spark, and energy and also to help organizations remain productive and creative. And if these individuals are going to hide knowledge rather than sharing it, then the investment in them will be a cost to the organization. As these individuals are who we refer to as the millennials, they don't believe serving the particular organization for more than two years, and it is definite that these people will take away the tacit knowledge and investment with them (Forbes.com, 2019).

It would be a good idea to try and engage these individuals in seminars and workshops, send them conferences, make them an expert panelist in discussions. This will help them to open up as they want to get recognition. Felicitate them with rewards and awards for their expert suggestions and knowledge sharing (Dodokh, 2019). Give them additional points in their performance assessment when they share knowledge. These are a few ways to engage them in knowledge sharing. Human resource practices need to be robust to reduce knowledge hiding behavior (Dodokh, 2019). HR Manager should also facilitate one-on-one dialogue with the supervisor and subordinates to encourage knowledge-sharing as research has shown that there are chances of trickle-down effect for knowledge hiding. Top management hiding knowledge or information with subordinate may encourage subordinate also to hide knowledge which may disturb the culture of the organization (Arain, Bhatt, Ashraf, & Fang, 2018)

### **Future Research Possibility & Limitations**

The survey conducted for this study was using a self-reporting instrument, and this gives way for the respondent not to show or exhibit knowledge hiding behavior which could also be one of the reasons the Playing dumb variable came out to be insignificant in this study. Very recently study of Jha & Varkkey (2018) has given a new dimension to knowledge hiding research. They have added a new dimension called “counter-questioning” which may be more relevant among working professionals. This dimension is not included here which is also one of the limitations, so in future studies, this can be one of the dimensions among others studied.

Here in this study, other types of personality traits are not considered. So in future studies, other personality traits like Big 5 or 16PFs can be studied to check as to which types of individuals with what kind of personality traits would be hiding knowledge. Connelly and Zweig (2015) were of the view that not all knowledge hiding is harmful. It can also be seen that knowledge hiding can promote the relationship among co-workers which might break the cycle of knowledge hiding in the organization (Connelly & Zweig, 2015). Being a Machiavellian has some advantage, in one of the debate it has been quoted that Microsoft and Apple could survive as Steve Jobs and Bill gates were very machiavellian in approach. So sometimes machiavellian people do certain bad things for the greater good. Another variable that can be studied with knowledge hiding is the kind of motivation that encourages individuals to hide knowledge. Even the reward system and recognition can be taken as an antecedent for knowledge hiding behavior. The sample size is not sufficiently large to generalize the proposition, so this limitation can be improved in future studies by introducing random sampling techniques instead of convenience and also targeting a bigger pool of homogenous groups (Psychology and Differences, 2019).

Finally, this research concludes, that Machiavellianism personality trait has an impact on knowledge hiding behavior. This indicates that improving such behavior can lead to more sharing, also a strong bond between the employees if established can break the vicious cycle and may lead to more sharing of knowledge in an organization. Managers should pay attention to individuals displaying machiavellian traits. Managers need to tackle this kind of personality with mixed attitudes (Zhao, Xiao, Mao, & Liu, 2018). For eg., a research-based on manufacturing sector has shown that through the Community of Practice (CoP), Management has encouraged the employees in short term management programme where these individual gets involved in problem-solving task with counterpart and this enables an individual to share knowledge (Schofield, Analoui, Brooks, & Hussain, 2018). And also suggested by recent studies in the field of knowledge management, that researcher should also focus on knowledge seekers which may be a new research idea different from knowledge sharing and knowledge hiding (Abubakara, Behraves, Rezapouraghdam, & Yildiz, 2019).

## References

- Abubakara, A. M., Behraves, E., Rezapouraghdam, H., & Yildiz, S. B. (2019). Applying artificial intelligence technique to predict knowledge hiding. *International Journal of Information Management*, 49, 45-57. doi:<https://doi.org/10.1016/j.ijinfomgt.2019.02.006>
- Andrew, J., Cooke, M., & Muncer, S. (2008). The relationship between empathy and Machiavellianism: An alternative to empathizing–systemizing theory. *Personality and Individual Differences*, 44(5), 1203-1211. doi:<https://doi.org/10.1016/j.paid.2007.11.014>
- Arain, G. A., Bhatt, Z. A., Ashraf, N., & Fang, Y.H. (2018, November 7th). Top-Down Knowledge Hiding in Organizations: An Empirical Study of the Consequences of Supervisor Knowledge Hiding Among Local and Foreign Workers in the Middle East. *Journal of Business Ethics*, 1-15. doi:<https://doi.org/10.1007/s10551-018-4056-2>
- Belschak, F., Den Hartog, Deanne, & De Hoogh, A. (2018, 6). Angels and Demons: The Effect of Ethical Leadership on Machiavellian Employees' Work Behaviors. *Frontiers in Psychology*, 9(1082). doi:10.3389/fpsyg.2018.01082
- Bergeron, B. (2003). *Essentials of knowledge Management* (1 ed., Vol. 28). New Jersey: John Wiley & Sons, Inc. Retrieved from <http://www.sciencedirect.com/reference/154782>
- Bircham-Connolly, H., Corner, J. L., & Bowden, S. (2005, 1). An empirical study of the impact of question structure on recipient sharing. *Electronic Journal of Knowledge Management*, 32, 1-10. Retrieved from [https://www.researchgate.net/publication/228343521\\_An\\_empirical\\_study\\_of\\_the\\_impact\\_of\\_question\\_structure\\_on\\_recipient\\_attitude\\_during\\_knowledge\\_sharing](https://www.researchgate.net/publication/228343521_An_empirical_study_of_the_impact_of_question_structure_on_recipient_attitude_during_knowledge_sharing)
- Blau, P. (1964). Justice in Social Exchange. *Sociological Inquiry*, 34(2), 193-206. doi:<https://doi.org/10.1111/j.1475-682X.1964.tb00583.x>
- Christie, R., & Geis, F. (1970). Implications and speculations. R. Christie & F. Geis (Eds.), *Studies in Machiavellianism* (pp. 339–358). New York: Academic Press.
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007, July). Trust, trustworthiness, and trust propensity: a meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, 92(4), 909–927. doi:10.1037/0021-9010.92.4.909
- Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P. (2011, July 8). When Knowledge Sharing Turns to Knowledge Hiding. *Strategy business*. Retrieved from <https://www.strategy-business.com/article/re00150?gko=00179>
- Connelly, C. E., Zweig, D., Webster, J., & Trougakos, P. (2012). Knowledge hiding in Organizations. *Journal of Organizational Behaviour*, 33(1), 64-88. doi:<https://doi.org/10.1002/job.737>
- Connelly, E. C., & Zweig, D. (2015). How perpetrators and targets construe knowledge hiding in organizations. *European Journal of Work and Organizational Psychology*, 24(3), 479-489. doi:10.1080/1359432X.2014.931325
- Cropanzano, R., & Mitchell, M. (2005). Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, 31(6), 874-900. Retrieved from <https://doi.org/10.1177/0149206305279602>
- Davenport, T. H., & Prusak, L. (1998). *Working Knowledge: How Organizations Manage What They Know*. Harvard Business School Press. doi:10.1145/348772.348775
- Demirkasimoğlu, N. (2016). Knowledge Hiding in Academia: Is personality trait as key factor. *International Journal of Higher Education*, 5(1). doi:<https://doi.org/10.5430/ijhe.v5n1p128>
- Dodokh, A. (2019). Impact of Human Resources Management Practices on Workplace Knowledge Hiding Behaviour. *Information and Knowledge Management*, 9(3), 27-44. doi:DOI: 10.7176/IKM/9-3-04

- Drory, A., & Gluskinos, U. (1980). Machiavellianism and leadership. *Journal of Applied Psychology*, 65(1), 81-86. doi:<https://doi.org/10.1037/0021-9010.65.1.81>
- Forbes.com. (2019). *Millennials Work for Purpose, Not Paycheck*. [online] Available at: <https://www.forbes.com/sites/karlmoore/2014/10/02/millennials-work-for-purpose-not-paycheck/#6928645e6a51> [Accessed 6 May 2019].
- Ford, D. (2008). Disengagement from knowledge sharing: the alternative explanation for why people are not sharing. *Administrative Sciences Associations of Canada*, 29, 1-24. Retrieved from [https://www.researchgate.net/publication/279439797\\_DISENGAGEMENT\\_FROM\\_KNOWLEDGE\\_SHARING\\_THE\\_ALTERNATIVE\\_EXPLANATION\\_FOR\\_WHY\\_PEOPLE\\_ARE\\_NOT\\_SHARING](https://www.researchgate.net/publication/279439797_DISENGAGEMENT_FROM_KNOWLEDGE_SHARING_THE_ALTERNATIVE_EXPLANATION_FOR_WHY_PEOPLE_ARE_NOT_SHARING)
- Husted, K., & Michailova, S. (2002). Diagnosing and Fighting Knowledge-Sharing Hostility. *Organizational Dynamics*, 31(1), 60-73. doi:10.1016/S0090-2616(02)00072-4
- Huysman, M., & de Wit, D. (2002). *Knowledge Sharing in Practice* (1 ed., Vol. 4). Springer Netherlands. doi:10.1007/978-94-015-9992-4
- Ináncsi, T., Lángb, A., & Bereczkeia, T. (2016). A Darker Shade of Love: Machiavellianism and Positive Assortative Mating Based on Romantic Ideals. *Europe's Journal of Psychology*, 12(1), 137-152. doi:10.5964/ejop.v12i1.1007
- Jha, J., & Varkkey, B. (2018). Are You a Cistern or a Channel? Exploring Factors Triggering Knowledge-Hiding Behavior at the Workplace: Evidence from the Indian R & D Professionals. *Journal of Knowledge Management*, 22(4), 824-849. doi:10.1108/JKM-02-2017-0048
- Kidwell, J., Vander Linde, K., & Johnson, S. (2000). Applying Corporate Knowledge Management Practices in Higher Education. pp. 28-33. Retrieved from <https://er.educause.edu/~media/files/articles/2000/12/eqm0044.pdf?la=en>
- Kucharska, W., & Wildowicz-Giegiel, A. (2017). Company Culture, Knowledge Sharing and Organizational Performance: The Employee's Perspective. *18th European Conference on Knowledge Management*, 1, pp. 524-531. Barcelona, Spain. Retrieved from <https://ssrn.com/abstract=3028665>
- Labaf, S. (2017). Knowledge hiding as an obstacle of innovation in organizations a qualitative study of software industry. *AD-minister N°*, 131 - 148. doi:10.17230/ad-minister.307
- Lee, H., So, K., & Tang, C. (2000). The value of knowledge hiding in two level supply-chain. *Management Science*, 46(5), 626-643. Retrieved from [https://www.anderson.ucla.edu/documents/areas/fac/dotm/bio/pdf\\_CT21.pdf](https://www.anderson.ucla.edu/documents/areas/fac/dotm/bio/pdf_CT21.pdf)
- Lin, H.-F. (2007). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of Information Science*. doi:doi/abs/10.1177/0165551506068174
- Liu, C. C. (2008). The Relationship Between Machiavellianism and Knowledge Sharing Willingness. *Journal of Business and Psychology*, 22(3), 233-240. doi:10.1007/s10869-008-9065-1
- Men, C., Fong, P. S., Huo, W., Zhong, J., Jia, R., & Luo, Jinlian. (2018). Ethical Leadership and Knowledge Hiding: A Moderated Mediation Model of Psychological Safety and Mastery Climate. *Journal of Business Ethics*, 1-12. doi:<https://doi.org/10.1007/s10551-018-4027-7>
- Mohayidin, M. G., Azirawani, M. N., Kamuriddin, N., & Idawati, M. (2007). The application of knowledge management in enhancing the performance of the Malaysian universities. *Electronic Journal of Knowledge Management*, 5(3), 301-312. Retrieved from [www.ejkm.com](http://www.ejkm.com)
- Pan, W., Zhou, Y., & Zhang, Q. (2016). Does Darker Hide More Knowledge? The Relationship between Machiavellianism and Knowledge Hiding. *International Journal of Security and Its Applications*, 10(11), 281-292. Retrieved from <http://dx.doi.org/10.14257/ijisia.2016.10.11.23>

- Pangil, F., & Nasurddin, A. M. (2013). Knowledge and the Importance of Knowledge Sharing. *Conference on Business Management Research*. Universiti Utara Malaysia, Sintok. Retrieved May 11, 2018, from <http://repo.uum.edu.my/16360/>
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36(6), 556-563. doi:[https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)
- Peng H. (2013). Why and when do people hide knowledge. *Journal of Knowledge Management*, 17(3), 398-415. doi:DOI.10.1108/JKM-12-2012-0380
- Postolache, A. (2017, August 6). 5 Benefits of Knowledge Sharing within an Organization. *quandora*. Retrieved from <https://www.quandora.com/5-benefits-knowledge-sharing-organization/>
- Psychology, I. and Differences, I. (2019). *Machiavellianism (Industrial-Organizational Psychology) IResearchNet*. [online] Psychology.iresearchnet.com. Available at: <http://psychology.iresearchnet.com/industrial-organizational-psychology/individual-differences/machiavellianism/> [Accessed 9 Apr. 2019].
- Renzl, B. (2005). Trust in management and knowledge sharing: the mediating effects of fear and knowledge documentation. *Omega Press*, 36(2). doi:<https://doi.org/10.1016/j.omega.2006.06.005>
- Šajeva, S. (2014). Encouraging knowledge sharing among employees: how reward matters. *Procedia - Social and Behavioral Sciences*, 156, 130 – 134. doi:<https://doi.org/10.1016/j.sbspro.2014.11.134>
- Sakalaki, M., Richardson, C., & Thepaut, Y. (2007). Machiavellianism and economic opportunism. *Journal of Applied Social Psychology*, 37(6), 1181-1190. doi:10.1111/j.1559-1816.2007.00208.x
- Schofield, K., Analoui, B., Brooks, J., & Hussain, S. F. (2018). Competitive communities of practice, knowledge sharing, and Machiavellian participation: a case study. *International Journal of Training and Development*, 22(3), 210-221. doi:<https://doi.org/10.1111/ijtd.12129>
- Silveste, J., Wyatt, M., & Randall, R. (2014). Politician personality, Machiavellianism and political skills as predictor of performance rating in political roles. *Journal of Occupation and Organizational Psychology*, 87(2), 258-279. doi: <https://doi.org/10.1111/joop.12038>
- Srivastava, A., Bartol, K. M., & Locke, E. A. (2006). Empowering Leadership in Management Teams: Effects on Knowledge Sharing, Efficacy, and Performance. *Academy of Management Journal*, 49(6), 1239–1251. doi:<https://doi.org/10.5465/AMJ.2006.23478718>
- Tangaraja, G., Rasdi, R. M., Ismail, M., & Samah, B. A. (2015). Fostering knowledge sharing behaviour among public sector managers: a proposed model for the Malaysian public service. *Journal of Knowledge Management*, 19(1), 121-140. doi:10.1108/JKM-11-2014-0449
- Wang, Y., Han, M., Xiang, D., & Hampson, D. (2019). The double-edged effects of perceived knowledge hiding: empirical evidence from the sales context. *Journal of Knowledge Management*, 23(2), 279-296. doi:10.1108/JKM-04-2018-0245
- Xiao, M., & Cooke, F. L. (2018). Why and when knowledge hiding in the workplace is harmful: a review of the literature and directions for future research in the Chinese context. *Asia Pacific Journal of Human Resources*. doi:<https://doi.org/10.1111/1744-7941.12198>
- Zhao, H., Liu, W. L., & Xiaoyu, Y. (2019). Leader–member exchange, organizational identification, and knowledge hiding: The moderating role of relative leader–member exchange. *Journal of Organizational Behavior*, 834-848. doi: <https://doi.org/10.1002/job.2359>
- Zhao, J., Xiao, S., Mao, J., & Liu, W. (2018). The Buffering Effect of Machiavellianism on the Relationship Between Role Conflict and Counterproductive Work Behavior. *Frontiers in Psychology*. doi:<https://doi.org/10.3389/fpsyg.2018.01776>

---

***Authors' Profile***

**Smita Pillai** is a Doctoral Student in the Institute of Management, Nirma University, Ahmedabad, Gujarat, India. She carries more than four years of teaching experience. She has been visiting faculty at IIPM-Ahmedabad, Amrut Mody School of Management, Ahmedabad University, Ahmedabad, India. She has more than three years of experience in the field of teaching and more than four years of experience in research. She has also presented research papers at national and international conferences. Her research interests are Internal Branding, Psychological capital, Employee Passion, Organizational Citizenship Behavior, Quality of work-life

**Nina Muncherji** is an Associate Professor and Chairperson of the Organizational Behaviour and Communication Area at the Institute of Management, Nirma University, Ahmedabad, Gujarat, India. She has been a visiting faculty for Organizational Behaviour at several management institutes in India and taught courses at Florida Atlantic University, USA. She has been conducting In-house training programs for Public and Private Sector Organizations. She is a Certified Personal Profile Analysis (PPA) Practitioner by Thomas International Ltd. She also is CB5 Certified. She has published several research papers in journals published from India and abroad. Prof. Muncherji has also published a series of Case lets on Management in Times of India (A News Daily), Ahmedabad Edition in 2001. She has written Role Plays, Cases, Teaching Notes and Technical Notes in the area of OB & HRM which have been published by The Case Centre (ECCH), UK. She has co-edited five books. Her research interests are Stress Management, Team Management, Knowledge Hiding; Organizational Learning, Team Effectiveness Work-Life Balance, Quality of Work Life, Higher Education, Personality Development, Business Etiquette, Soft Skills.

---