

Overcoming Virtual Distance through Effective Communication and Team Trust

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Abstract

One of the important determinants of a successful organization is communication. This paper explores the impact of leader communication effectiveness on employee engagement in a virtual team whose members transcend time, space and organizational boundaries. It has also investigated whether trust would mediate the relationship between leadership communication and engagement. The proposed research model was tested using a survey research method. Data was collected using a questionnaire and

was analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The results confirmed that leadership communication effectiveness positively impacts employee engagement in virtual teams, and trust partially mediates the relationship between the two. There was no significant effect of team size in engaging employees virtually.

Keywords: *leadership communication effectiveness, trust, team size, virtual team, employee engagement*

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Introduction

With globalization and advances in information technology, virtual work arrangements have become a staple in organizations. The business reasons for having employees working virtually are: reduced real estate expenses, improved customer service, leverage global talent, reduced time to market, environmental benefits, to name a few. Virtual teams have significant advantages; however, it poses some challenges too. A rich body of research has listed the following challenges with virtual teams: relational communication and trust, cultural issues, feelings of isolation (out of sight, out of mind), differences in work ethic, risk of low productivity as some team members may not use time wisely and others may suffer burnout Ferrazi (2014). Given the premise that the team is spread across locations and time zones, engaging such a team seems to be a major challenge for any organization. The complexity of communication effectiveness, trust and employee engagement becomes multi-fold in a virtual environment. The role of leadership communication has undergone a paradigm shift in the last few years. The shift that has emerged over the years is enlisted below:

1. Communication has shifted from verbal to e-communication
2. Formal authoritative and hierarchical system of control, to interpersonal communication
3. From top-down, to bottom up communication and collaborative communication
4. From face time at office, to face time from anywhere, anytime
5. From communicating feedback during annual appraisal, to better conversations everyday
6. A shift from command and control, to inclusive communication and engagement
7. From power to control, to empower and influence others
8. From linearity to power of network

With emerging changes at the workplace, it is imperative to understand the interplay between leaders' communication effectiveness and employee

engagement. The transition from an industrial to information age has definitely changed the ways and methods of communication. Communication in today's organizations is enhanced and enriched by computer aided technologies viz. email, instant messaging, intranet and extranet links, videoconferencing, etc. Robbins (2005). This paper aims at examining the role of leadership communication effectiveness and trust between the team members in engaging the employees in the newly evolved organizational context (virtual teams). It is proposed to assess the impact of leadership communication effectiveness with a mediating role of trust between the team members on employee engagement. It also examines if size of the team has any effect on employee engagement.

Purpose of this study:

Various advances in technology have enabled organizations to alter and evolve their way of working from collocated teams to virtual teams. This has changed the way business is conducted. Engaging a virtual team void of face-to-face interaction increases the challenges of communicating effectively. The leader's communication and its impact on fostering trust amongst team members plays an important role in engaging the team spread across the globe. An engaged employee is a valuable asset as he contributes positively and exponentially in organizational success. This research aims to study the impact of effective leader communication, trust between the team members in virtual teams with a research context focus on employee engagement. This research is based on the assumption that effective communication by a leader increases employee engagement. We also examine if the size of the team impacts engagement of employees in a virtual workforce. This study contends that effective leadership communication instils trust amongst team members and in turn, positively impacts employee engagement in virtual teams. The study is guided by the following research questions:

1. How does leadership communication impact the engagement of employees in virtual teams?
2. How does trust between the team members enhance employee engagement?
3. How does the size of the team affect engaging of employees in virtual teams?

This study can provide insights to business leaders to modify their communication style to suit the virtual work settings. It will also help HR professionals to either hire the right personnel to lead virtual teams or train them with the requisite skill sets.

Theoretical Foundation

Employee engagement:

The definition and measurement of employee engagement is based upon various theoretical perspectives. Kahn (1990) focuses on physical, emotional and cognitive work behaviour whereas Schmidt, Harter & Hayes (2004) overlap engagement with constructs of job satisfaction and job involvement. Maslach & Leiter (2008) conceptualize engagement as opposite of burnout. Researchers have divergent opinions about what drives or influences employee engagement. Various researchers on employee engagement models: Schaufeli & Bakker (2004), Mc Bain (2006), Saks (2006), Bakker & Demerouti (2007), Bersin (2015), and team effectiveness models: Driskell, Salas and Hogan, (1987), Rasker, Van, Broek, and Essens (2001) are consistent with the notion that leader communication is an antecedent for employee engagement and organizational success. Work engagement is an attribute experienced both at individual and team levels and has been found to be influenced by various job-related factors like nature of the task, leadership coaching, social support, opportunities at work (Ahuja & Chaturvedi, 2017; Demerouti, Bakker & Schaufeli, 2001; Harter et al., 2002; Salanova et al., 2005). Cordery and Soo (2008), in their paper titled, 'Overcoming Impediments to Virtual Team Effectiveness' argued that "compared to traditional teams, virtual teams face challenges with respect to (a) accessing, sharing, and capitalizing on team

knowledge; (b) emergence of collective engagement with respect to team task; and (c) having a sense of collective competence which is linked with performance excellence." Gibson and Gibbs (2006) have emphasised the need to pay attention to the attributes of virtual teams that may affect effective team processes and conditions required for effective performance. On the basis of literature review, the operational definition of employee engagement in the current study captures several perspectives that run across the various engagement models and definitions with relevance in the context of virtual workforce. Thus, employee engagement has been construed as (a) having role clarity; (b) having a thorough knowledge of business context; (c) working cohesively with the team; (d) feeling of being rewarded and valued (Shuck and Wollard, 2010).

Leadership communication in virtual work setting:

Leadership communication is crucial for organizational performance. Bowman (1964) defines a leader as, "a person who is able to communicate well, make sound decisions, and get things done with and through people." Kotter (1996) in his book 'Leading Change', stated, "Without credible communication, and a lot of it, employees' hearts and minds are never captured." In geographically dispersed teams, communication becomes the principal means to lead successfully (Penle & Hawkins, 1985). Shockley and Zalabak (2002) stated that the key to organizational excellence in the complex and information-rich society, is effective communication. According to Mihhailova (2011), virtual relationship between a manager and an employee creates a challenge in communication. As per Slack (2010), establishing satisfactory employee communication is one of the suggested ways to communicate effectively. Marlow, Lacerenza & Salas (2017) stated that communication is an essential backbone for successful working of a virtual team in an organization. It is also one of the most researched constructs in distributed teams (Nuefeld, Wan & Fang, 2010). Various research studies have emphasized the significance of effective leader communication (Barrett, 2006; Beranek & Martz, 2005; Shachaf &

Hara, 2005). According to Korzynski (2015), the time spent by leaders in internal online networking platforms, the code of online networking and the culture enhances employee engagement. Leaders spending more time on communication through online have been found to bring positive outcomes. Desai & Srivastava (2017) stated that a communication-centric approach of leaders positively moderates the relationship between leadership style and organization performance.

There is no doubt that to achieve maximum output, leaders require to communicate well and frequently with their employees, irrespective of whether the communication is face-to-face or virtual. If leaders are able to communicate effectively, it creates synergy, gives a sense of purpose to employees and this helps in cohesively working together as a team. Historically, communication serves four major functions - (a) Controls members' behaviour, (b) Fosters motivation, (c) Provides a means for emotional expression, (d) Facilitates decision making (Robbins, 2005). However, in the context of virtual teams, the functions of communication go beyond the ones mentioned above. The various aspects of communication in virtual teams include communication technology, communication climate, cross cultural communication, computer mediated communication and communication frequency (Jarvenpaa & Leidner, 1999; Manheim & Belanger, 2002; Tofanelli, 2013; Marlow et al., 2017). Though these aspects have important ramifications for virtual teams, the social perspective of leadership communication among virtual teams in its relationship with employee engagement is missing. Korzynski (2015) has called for attention to the social aspects for leadership communication on online platforms and even states the need for communication skill training to leaders. For the purpose of this study, communication effectiveness is based on a leader who is able to:

1. Foster trust, respect and open communication top down and bottom up

2. Enable team members to be honest and straightforward with their leader
3. Speaks clearly, confronts effectively, informs objectively
4. Establishes a good relationship to achieve common goals and objectives

On the basis of literature review and the gaps identified, the first hypothesis formulated is:

H1: Leadership communication effectiveness impacts employee engagement in virtual teams

Trust and Engagement in context of virtual teams:

Covey (1989) stated trust to be the foundational principle that holds all relationships. He further emphasized trust as the most essential ingredient in effective communication. The basis of being a successful leader is the ability to build trust. The leader should be able to inspire trust merely through his behaviour and actions. What gives rise to trust is: openness in communication (Dirks & Ferrin, 2001), employees treated fairly and with respect (Carucci, 2018), leaders who walk the talk (Zenger & Folkman, 2019), and leaders who value their team's work (Whitener, 2001). Fostering trust in a team that rarely meets in person is a difficult task. OnPoint Consulting's global research (2011) confirmed trust to be an essential ingredient for success of virtual collaboration. Traditionally, trust building has been based on observed past behaviour. Additionally, earning trust demands time. Whereas virtual teams are often formed to complete short projects and go live in a short span of time, opportunities to earn trust are far and few. They are left with little choice but to trust their leader and the team members. This gave rise to a concept of swift trust, essentially the opposite of earning trust. Swift trust assumes that others are trustworthy and thus, begin with a positive intent that trust already exists. This concept was first introduced by Meyerson (1996) and later studied in detail by Jarvenpaa & Leidner (1999).

Studies have found a strong correlation between trust and team effectiveness (Breuer, Huffmeier and Hertel, 2016), trust in the leader and organizational commitment (Folger & Konovsky, 1989), trust and team performance (Murphy, 2013), positive leadership behaviour and trust (Hacker, Johnson, Saunders & Thayer, 2019; Srivastava and Vyas, 2015). Studies have also demonstrated the mediating role of trust between organizational support and organizational commitment (Whitener, 2001), authentic leadership and employee engagement (Wang, 2013). Sarker et.al (2011) emphasized the significance of the mediating role of trust and communication in influencing the performance of a virtual team.

This research suggests assessing the mediating role of trust of team members between leadership communication and employee engagement.

H2: Trust mediates the relationship between communication effectiveness and employee engagement

Team Size in Virtual Teams:

Employees do not come with an operating manual. Every individual is different and is wired differently. Given the paradigm shift in the workplace from face-to-face teams to virtual teams, the complexity of managing people increases. Is there an ideal team size for a manager to lead successfully? This question led the researchers to look into details of the impact of team size on engagement, performance and success in the literature review. Surprisingly, there are varied views about the same.

A common factor that appears in several team effectiveness models is size of the team (Driskell, Salas & Hogan, 1987; Salas, Dickinson, Converse, and Tannenbaum, 1992; Rasker, Van, Broek, and Essens, 2001). Several studies reveal that team size has an influential role in team performance; smaller the better; larger teams have difficulty in developing and maintaining role structures and responsibilities (Saafain & Shaykhian, 2014; Hackman & Morris, 1975). According to Wakefield, Leidner & Garrison (2008),

virtual team size is an important factor that should be considered during team formation. Their study also infers that team size is positively related to the task and process conflicts. According to an article “Getting Virtual Teams Right”, published in Harvard Business Review (2014), the right size of a team is the starting point in putting the virtual team together. The article states: “Most effective virtual teams are small in size (less than 10 members in a team).” Gallup (2020) studied the engagement levels of 3 million teams from a perspective of finding the right team size. The study concluded that team size has little role to play in engagement; what matters is how engaged is the team manager irrespective of the size of the team. In this research, we identified team size as a moderator between leadership communication effectiveness and employee engagement. While we expect leadership communication and team trust to directly influence team engagement, we also expect that this relationship might be contingent upon the team characteristics such as team size. Schmutz, Meier and Manser (2019) reported the influence of team size as a moderator between teamwork and performance. For the purpose of this research, we treat team size as a moderating variable.

H3: Team Size moderates the relationship between communication effectiveness and employee engagement

The Research Model

Studies have shown that leadership communication has an impact on employee engagement. Figure 1 shows the proposed research model.

1. Exogenous variable: Communication effectiveness
2. Endogenous variable: Employee Engagement
3. Mediating variable: Trust between team members
4. Moderating variable: Team Size
5. Individual Control variables: Age, work experience and gender
6. Control variable:
 - a. Team size of minimum 4 people, at least 2 out of these should be located virtually.
 - b. Minimum 6 months should have been spent in the virtual team.

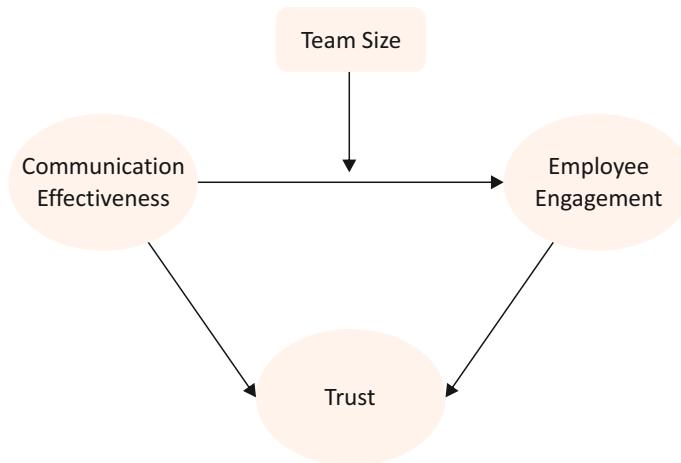


Figure 1: Research Model

Research Method:

This research is a correlational study. Purposive non-probability sampling was used. Cross-sectional data was gathered using survey method.

questionnaire used 5 point Likert scale with responses ranging from 1 to 5 where 1 = strongly disagree and 5 = strongly agree. It had a total of 30 questions.

Data Collection:

The data was collected by directly approaching the participants as well as via online survey. For online survey, participants were connected through LinkedIn and Facebook. The survey was shared with only those participants who confirmed having experience in virtual teams and gave their consent. The

After cleansing of data, 305 responses could be used for data analysis. The respondents belonged to nine different industries with the age group ranging from 22 to 64 years. The size of the virtual team comprised of minimum four members, working together for more than six months. Demographics of the respondents are presented in Table 1.

Table1: Demographics of respondents

Demographics	Category	Number	Percentage
Gender	Male	229	75.08
	Female	76	24.92
Total Work Experience	Below 5 years	36	11.80
	6-10 years	91	29.84
	11-15 years	90	29.51
	16-20 years	53	17.38
	Above 20 years	35	11.48
Team Size	Upto 5	86	28.19
	6 to 10	74	24.26
	More than 10	145	47.54

To measure the hypothesised model, the following scales were used.

Employee Engagement

Baver's scale of 'role clarity' (2002) was integrated with Brown and Leigh's sub-scale of psychological climate – rewarded and valued; works well with colleagues (1996) was adapted to measure employee engagement. Example of sample items:

1. I precisely know what is expected from me
2. My organization recognizes the significance of the contributions I make
3. My team is supportive of my ideas.

Internal consistency of measurement model for Employee Engagement:

Cronbach's Alpha	Composite Reliability	Average Variance Extracted
0.894	0.912	0.511

Communication Effectiveness

Van Leuven's (1991) leadership communication effectiveness instrument was adapted for the purpose of this research. While different aspects of communication effectiveness could have been assessed like communication climate, timelines, source, channels, technology, etc., this research paper

focused on assessing Leadership Communication Dimension. The 10 questions of this instrument essentially delve into competencies of speaking effectively, effective listening, institutionalizing an environment of trust and open communication, informing appropriately and confronting effectively.

Internal consistency of measurement model for Leadership Communication Effectiveness:

Cronbach's Alpha	Composite Reliability	Average Variance Extracted
0.923	0.926	0.620

Trust

Kanawattanachai and Yoo's scale of trust (2002) was used to measure trust between team members. Example of sample items:

2. I would have to say that we (my team) have made considerable emotional investments in our working relationship.

1. Most of my teammates can be relied upon to do as they say they will do

Internal consistency of measurement model for Trust:

Cronbach's Alpha	Composite Reliability	Average Variance Extracted
0.840923	0.882	0.555

Data analysis

Data was first examined to ensure if statistical and theoretical assumptions were supported. Sample size, distribution of items for each variable, missing data, and common method bias were thoroughly checked. PLS SEM was preferred over CB-SEM as the data was not normally distributed (Hair and Ringle, 2015). This research study used Smart PLS 3 software.

Empirical Results

The measurement model was evaluated for:

1. Cronbach's Alpha: Should be higher than 0.70
2. Composite Reliability: Should be higher than 0.70
3. Indicator Reliability (Outer Loadings): Should be higher than 0.70; if required, could be retained if the value lies between 0.40 & 0.70
4. Average Variance Extracted: Should be higher than 0.50

5. Discriminant Validity – Cross loadings, Fornell Larcker Criterion & HTMT criterion.

fetch better results and their tolerance value should be higher than 0.2

All the items in the questionnaire were retained after evaluating the above criteria.

2. Coefficient of determination (R^2) – predictive power of model
3. Size and significance of path coefficients

After having assessed the measurement model, the structural model was evaluated for:

No collinearity issues surfaced. All the outer VIF values were below 3. Inner VIF values also indicated data being free of common method bias (Kock 2015).

1. VIF: value should be lower than 5; values below 3

Table 3: Inner VIF Values

Constructs	Communication Effectiveness	Employee Engagement	Trust
Communication Effectiveness		1.371	1.000
Employee Engagement			
Trust		1.371	

The values of R^2 for the endogenous construct are as follows:

1. Employee Engagement: 0.525 (moderate)
2. Trust: 0.270 (weak)

R^2 values of 0.75, 0.50 or 0.25 for endogenous latent variable are respectively described as substantial, moderate and weak (Hair, et al., 2013).

The results for path coefficient for direct, total and indirect effects after the bootstrap procedure with 5,000 subsamples are summarized in Table 4, Table 5 and Table 6 respectively.

Table 4: Path Coefficient

	Direct Effect	T Statistics (O/STDEV)	p Value	95% Confidence Intervals	Significance ($p < 0.05$)
Communication -> Employee Engagement	0.417	8.561	0.0001	[0.322, 0.519]	Yes
Communication -> Trust	0.520	9.654	0.0001	[0.416, 0.624]	Yes
Trust -> Employee Engagement	0.414	7.472	0.0001	[0.303, 0.519]	Yes

Table 5: Total Effects

	Total Effect	t Values	p Values	95% Confidence Intervals	Significance (p < 0.05)
Communication -> Employee Engagement	0.632	17.574	0.0001	[0.564, 0.701]	Yes
Communication -> Trust	0.520	9.654	0.0001	[0.416, 0.624]	Yes
Trust -> Employee Engagement	0.414	7.472	0.0001	[0.303, 0.519]	Yes

Table 6: Indirect Effects

	Indirect Effect	T Statistics (O/STDEV)	p Value	95% Confidence Intervals	Significance (p < 0.05)
Communication -> Employee Engagement	0.215	6.011	0.0001	[0.147, 0.286]	Yes

VAF is 65.98 % of the effect of communication on employee engagement was explained via trust mediator. This is partial mediation as VAF is larger than 20% but smaller than 80%. The size of the team did not have any effect on employee engagement as the p value for the same was more than 0.05.

Discussion of results and Conclusion

This research study had three objectives - to examine the impact of leadership communication effectiveness on employee engagement; to examine the mediating role of trust between communication effectiveness on employee engagement and to assess the moderating role of team size on communication effectiveness and employee engagement.

The data analysis found a significant relationship between communication effectiveness and employee engagement with a path coefficient of 0.41 and p value of 0.0001. It is in line with the literature which has reported an association between communication and trust in global virtual teams by Jarvenpaa & Leidner (1999). The first hypothesis H1 is accepted that leadership communication effectiveness impacts employee engagement. It is interesting to note that Thomas et. al. (2009) found trust between leaders and

employees was influenced by communication and trust further influences employee engagement. The study also found significant relationship between trust and employee engagement with a path coefficient of 0.414 and p value of 0.00. When tested for mediation effect of trust between the two, it was found that trust partially mediates the relationship between leadership communication effectiveness and employee engagement with a p value of 0.000, thus accepting H2. Trust within team members with respect to employee engagement is a new phenomenon. Findings from both hypothesis one and two emphasize the direct effect of leadership communication effectiveness on virtual team engagement and also the significance of trust building among virtual teams to achieve the desired results.

Previous studies have shown the mediating role of trust with transformational leadership and team performance (Chou, et al., 2013); trust in top management mediates management communication and employee involvement, and employee involvement and organizational commitment (Mahajan, Bishop and Scott, 2012). Leaders could cultivate trust by empowering team members

(Srivastava and Vyas, 2015). The value of path coefficients helped us derive the relative importance of the exogenous driver constructs. Communication effectiveness and trust are closely related in engaging employees from a distance. The research by Cordery and Soo (2008) provided the process model for managing virtual team effectiveness. According to them, virtual team effectiveness can be enhanced by psychological safety. Psychological safe communication climate in virtual teams helps mitigate the process loss (Gibson & Gibbs, 2006), empowers leadership, builds transactive memory by sharing personal as well as new information about team members, work engagement, collective efficacy, provides technological support and manages differences.

The size of the team did not have any effect on employee engagement as the p value for the same was more than 0.05, thus rejecting our H3. The past models and study by Ferrazi (2014) do not fully support the findings. The result of insignificance of team size corroborates with the study of Gallup by Harter (2020) and Schmutz et.al. (2019). Past research studies by Riopelle et al. (2003) and Chidambaram and Tung (2005) have found a negative influence of team size on virtual teams. According to these studies, a larger team size makes interaction difficult, de-emphasizes the weightage of individual contributions for team success, leading to loss of motivation. Though this could be a complex phenomenon and requires further investigation, we infer that this could be due to the very nature of virtual distances and technology. Once the leaders have established themselves, their communication is effective and trust is built among the team members, it's possible then that team size may not really matter. We may thus infer that size of the team doesn't really impact engagement equation in virtual teams.

To conclude, the proposed research model is accepted, and it emphasizes that leadership communication effectiveness and trust are essential in leading and engaging employees in a geographically dispersed team. Team size does not moderate these

relationships. Leaders need to make focussed efforts in fostering an environment of trust so that effective communication from a leader positively impacts employee engagement.

Applicability and Generalization

The study has made a theoretical contribution by identifying leadership communication effectiveness and trust between team members as key determinants of employee engagement in virtual settings. It has reconfirmed the significance of trust among virtual team members. It has further established that team size does not moderate the relationship between communication effectiveness of a leader and employee engagement. This study could help organizations train their virtual managers in communication skills so as to have engaged employees. Organizations can also pay attention to the communication skills of people while hiring managers. The findings of the study could be generalized with a caveat that the sampling in the study was purposive and was restricted to certain industry types.

Research Limitations and Scope for further research

This study suffers from certain limitations. The sample studied does not cover the cultural nuances that are part and parcel of virtual teams. Similarly, there could be several other variables that may affect communication effectiveness such as face-to-face interaction frequency, usage of different technologies, etc. Studies require to pay attention to those factors. A large sample size comprising of cultural background details could be used for further verification of the findings. The data was skewed towards males, leaving out the scope of gender-wise analysis, which might reveal interesting findings. The response to the survey was collected in a single shot, though the study did check for common method bias, and it was found to be absent. In future studies, data may be triangulated employing other methods, like seeking team level responses, responses from other co-workers in organizations, keeping a time gap in data collection on independent and dependent variables, etc.

References

- Ahuja, J, and N Chaturvedi. (2017). "Job Crafting and Employee Engagement: A multivariate study." *NMIMS Management Review*, 106-120.
- Allen, R.L. (2005). "Thesis: Leadership and Motivation of Virtual Teams." Northcentral University, AR., USA.
- Andres, H. P. (2002). "A comparison of face-to-face and virtual software development teams." *Team Performance Management*, 39.
- Aryee, S., Budhwar, P. S., and Chen, Z. X. (2002). "Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model." *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior* 23, no. 3: 267-285.
- Baird, Jr. (1977). "The Dynamics of Organizational Communication." New York: Harper & Row. 236-239.
- Barrett, L.F. (2006). "Are emotions natural kinds?" *Perspectives on Psychological Science* 1, no. 1: 28-58.
- Bass, B. M, and B. J. Avolio. (2000). "MLQ Multifactor Leadership Questionnaire."
- Bass, B.M. (1985). "Leadership and performance beyond expectations." New York: NY Free Press.
- Baver, C.J. (2002). "A Longitudinal Evaluation of the Impact of Organization Structure on Role Ambiguity & Work Group Performance." University of Sarasota, Florida.
- Bell, B. S, and S. J. Kozlowski. (2002). "A typology of virtual teams: Implications for effective leadership." *Group & Organization Management*: 14-49.
- Beranek, P.M., and B Martz. (2005). "Making virtual teams more effective." *Team Performance Management: An International Journal* 11, no. 2/3: 200-213.
- Biswas, S. (2009). "Organizational culture and transformational leadership as predictors of employee performance." *Indian Journal of Industrial Relations*, 611-627.
- Bowman, G.W., Jones, L.W., Peterson, R.A., Gronouski, J.A., Mahoney, R.M. (1964). "What helps or harms promotability?" *Harvard Business Review*, 6-18.
- Childres, WH. (2009). "Dissertation on Transformational leadership and its relationship to trust and behavioural integrity." Saybrook Graduate School and Research Center.
- Chou, H, Y Lin, H Chang, and W Chuang. (2013). "Transformational Leadership and Team Performance: The Mediating Roles of Cognitive Trust and Collective Efficacy." *Sage Journal*.
- Covey, Stephen. (1989). *7 Habits of Highly Effective People*.
- Craig, JE. (2013). "Normative Leadership Theories ." In *Meeting the Ethical Challenges of Leadership*. Sage Publications.
- D'Souza, GC, and SM Colarelli. (2010). "Team member selection decisions for virtual versus face-to-face teams." *Computers in Human Behaviour*, 630-635.
- Day, Stephen J. Zaccaro, Stanley M. Halpin. (2004). *Leader Development for Transforming Organizations: Growing Leaders for Tomorrow*.
- Desai, D, and M Srivastava. (2017). "Emotional intelligence - the moderator of leadership styles and performance." *NMIMS Management Review*, 35-56.
- Dirks, K. T, and D. L. Ferrin. (2002). "Trust in leadership: Metaanalytic findings and implications for research and practice." *Journal of Applied Psychology* 87: 611-628.

- Dirks, K. (2002). "Trust in organizations." Sage Foundation: 21-40.
- Duarte, DL, and NT Synder. (1999). "Mastering virtual teams." Jossey - Bass.
- Farndale, E., Hope?Hailey, V. Kelliher, C. (2011). "High commitment performance management: The roles of justice and trust." Personnel Review.
- Ferrazi, K. (2014). "Getting virtual teams right." Harvard Business Review.
- Figueroa, JG. (2011). "Dissertation: Manager's leadership styles and employee engagement: quantifying manager's influence." Capella University.
- Hackman, J.R, and C.G. Morris. (1975). "Group tasks, group interaction process and group performance effectiveness: A review and proposed integration." New York: Academy Press.
- Hackman, J.R, and G.R. Oldham. (1980). "Work redesign."
- Hair, J, Hult, C Ringle, and M Sarstedt. (2013). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).
- Hair, J.F, and C.M. Ringle. (2015). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).
- Harter, J. (2020). "Whats the ideal team size?" Gallup.
- Harvard Business Review. (2019). <https://www.extension.harvard.edu/professional-development/blog/challenges-managing-virtual-teams-and-how-overcome-them>.
- Holton, J. A. (2001). "Building trust and collaboration in a virtual team." Team Performance Management, 36.
- Jarvenpaa, S. L, and D. E. Leidner. (1999). "Communication and trust in global virtual." Organization Science, 791-865.
- Jarvenpaa, S. L, K Knoll, and D. E. Leidner. (1998). "Is Anybody Out There? Antecedents of Trust in Global Virtual Teams." Journal of Management Information Systems, 29.
- Jenster, N.P. (2010). "Leadership Impact on Motivation, Cohesiveness and Effectiveness in Virtual Teams: A FIRO Perspective." Thesis: Grenoble Ecole de Management.
- Joshi, A, M Lazarova, and H Liao. (2009). "Getting Everyone on Board: The Role of Inspirational Leadership in Geographically Dispersed Teams." Organization Science 20, no. 1: 240-252.
- Kahn, William. (1990). "Psychological conditions of personal engagement and disengagement at work." Academy of Management Journal, 692-724.
- Kanawattanachai, P, and Y Yoo. (2002). "Dynamic nature of trust in virtual teams ." Strategic Inform Systems.
- Kirkman, B.L, and B. Rosen. (1999). "Beyond self-management: The antecedents and consequences of team empowerment." Academy of Management Journal, 58-74.
- Klendauer, R., and Deller, J. (2009). "Organizational justice and managerial commitment in corporate mergers." Journal of Managerial Psychology.
- Kock, N. (2015). "Common Method Bias in PLS SEM: A full collinearity assessment approach." International Journal of e-collaboration 11, no. 4: 7.
- Kotter, John. (1996). Leading Change.
- Kumar, A, and D Israel. (2012). "Authentic Leadership and Work Engagement." Indian Journal of Industrial Relations 47, no. 3: 498-510.
- Leidner, S L, and D E Jarvenpaa. (1999). "Communication and Trust in Global Virtual Teams." Organization Science 10, no. 6: 791-815.

- Lipnack, J, and J Stamps. (2000). "Managing a Virtual Workplace." *The Academy of Management Executive*, 81-90.
- Macey, H. M, and B Schneider. (2008). "The Meaning of Employee Engagement." *Industrial and Organizational Psychology*, 3-30.
- Mahajan, A, J Bishop, and D Scott. (2012). "Does Trust in Top Management Mediate Top Management Communication, Employee Involvement and Organizational Commitment Relationships?" *Psychology*.
- Marlow, S, C Lacerenza, and E Salas. (2017). "Communication in virtual teams: a conceptual framework & research agenda." *Human Research Management Review* 27, no. 4.
- Maslach, C, and M. P. Leiter. (2008). "Early predictors of job burnout and engagement." *Journal of Applied Psychology* 93, no. 3: 498-512.
- McAllister, D. (1995). "Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations." *Academy of Management Journal*, 24-59.
- McKnight, D. H., Cummings, L. L., & Cherany, N. L. (1998). "Initial trust formation in new organizational relationships." *Academy of Management Review*, 473-490.
- Meyerson, D., Weick, K. E., Kramer, R. M. (1996). "Swift Trust And Temporary Groups. Trust In Organizations." *Frontiers of Theory And Research*, SAGE Publication, 166-195.
- Mihhailova, G., Kandela, O., Turk, K. (2011). "Virtual work usage and challenges in different service sector branches." *Baltic Journal of Management* 6, no. 3: 342-356.
- Moore, T.G. (2008). "Virtual team member motivation in new product development: An investigation into the influence of leadership behaviours." Thesis: Cappella University, USA.
- Mulik, S, M Srivastava, and N Yajnik. (2020). "Flow Experience and MOOC Acceptance: Mediating Role of MOOC Satisfaction." *NMIMS Management Review* 38, no. 1: 59.
- Neufeld, D, and Y Fang. (2010). "Remote Leadership, Communication Effectiveness and Leader Performance." *Group Decision & Negotiation*.
- Nydegger, Rudy, and Liesl Nydegger. (2010). "Challenges in Managing Virtual Teams." *Journal of Business & Economics Research*, 69.
- Pati, S.P. (2012). "Development of a Measure of Employee Engagement." *Indian Journal of Industrial Relations* 48, no. 1: 94-104.
- Penle, L.E, and B Hawkins. (1985). "Studying interpersonal communication in organizations: a leadership application." *Academy Management Journal*, 309-328.
- Rigdon, Sarstedt, Ringle, Henseler, and Hair. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*.
- Robbins, Stephen. (2005). "Communication." Chap. 10 in *Organization Behavior*, 296.
- Robbins, Stephen P. (2005). "Contemporary Issues in Leadership." In *Organizational Behavior*, by Stephen P Robbins, 356. Prentice-Hall India.
- -. *Organizational Behaviour*. 13. 2013.
- Saafein, O, and G Shaykhian. (2014). "Factors affecting virtual team performance in telecommunication support environment." *Telematics and Informatics* 31, no. 3: 459-462.
- Schaufeli, W.B, I.M Martinez, A.M Pinto, M Salanova, and AB and Bakker. (2002). "Burnout and engagement in university students: a cross-national study." *Journal of Cross-Cultural Psychology* 33, no. 5: 464-481.

- Schmidt, F. L, J. K Harter, and T. L. Hayes. (2004). "Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis." *Journal of Applied Psychology* 87: 268-279.
- Schmutz, J.B, L.L Meier, and T Manser. (2019). "How effective is teamwork really? The relationship between teamwork and performance in healthcare teams: a systematic review and meta-analysis." *BMJ Open*.
- Shachaf, P, and N Hara. (2005). "Team Effectiveness in Virtual Environments: An Ecological Approach ." *Teaching and Learning with virtual teams*: 83-108.
- Shockley, P, and Zalabak. (2002). "Fundamentals of Organizational Communication: Knowledge, Sensitivity, Skills." Boston, MA: A Pearson Education Company, 4-5.
- Shuck, B, and K Wollard. (2010). "Employee Engagement & HRD: A seminal review of the foundations." *Human Resource Development Review*, 89-110.
- Slack, F.J., Orife, J.N., Anderson, F.P. (2010). "Effects of commitment to corporate vision on employee satisfaction with their organization: An empirical study in the United States." *International Journal of Management* 27, no. 3: 421-436.
- Srivastava, M, and A. K. Sinha. (2009). "Relationship between organizational support and managerial effectiveness: An exploration." *Management and Labour Studies* 34, no. 4: 537-555.
- Srivastava, M, and R. Vyas. (2015). "Empowering leadership: A study of team leaders and team members." *The Indian Journal of Industrial Relations*, 696-712.
- Vance, R. (2008). *Effective Practice Guidelines - Employee Engagement & Commitment*. SHRM Foundation.
- Wakefield, R, D Leidner, and G Garrison. (2008). "A Model of Conflict, Leadership, and Performance in Virtual Teams." *Information Systems Research* 19, no. 4: 434-455.
- Wang, D. S., and Hsieh, C. C. (2013). "The effect of authentic leadership on employee trust and employee engagement." *Social Behavior and Personality: an international journal*, 613-624.
- Yukl, G., Gordon, A, and T. Taber. (2002). "A hierarchical taxonomy of leadership behaviour: Integrating a half century of behaviour research." *Journal of Leadership & Organisational Studies* 9, no. 1: 15-32.

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