

Full Length Research Paper

Manifestation of emotional intelligence and Transformational leadership in virtual teams: Case study of Nairobi technology hub

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The dynamic nature of business and organizational operations in the 21st century as being influenced by tough economic times, globalization and need for higher effectiveness is forcing leaders to adopt more relevant approaches to management. One such adaptation is the use of virtual teams for international organization that have globally distributed offices and functions. This study provides insights into the role of emotional intelligence and leadership skills necessary for ensuring individual success and team effectiveness in a virtual team within Save the Children. The research followed a descriptive design utilizing non-probability sampling and data collected using online questionnaire where both open ended and structured questions were used. The main themes being assessed were manifestation of emotional intelligence in a virtual team and the relevance of transformational leadership skills in leading such teams. The study reveals significant presence of skills associated with emotional intelligence like self-awareness, empathy and social intelligence. There is also evidence that the individual members of the team under study have common expectations on the leadership skills required for successful management of a virtual team.

Key words: Emotional intelligence, leadership, virtual teams, globalization.

INTRODUCTION

With increased need for high efficiency and low cost of running operations, many organizations are being forced to explore innovative ways of remaining relevant and competitive. While non-governmental organizations (NGOs) are not primarily focused on making profits, being able to deliver quality programs at low cost remains a key area of focus. Some of the options being considered include use of virtual teams in strategic locations around the world, an idea being made possible

through use of advanced technology and effective leadership.

According to Gazor (2012), there are several problems that virtual teams face including ineffective communication, broken trust among members and with leadership especially and intercultural differences. On the other hand, numerous opportunities arise because of this strategic approach in using virtually distributed teams.

Global companies are using virtual teams to cut

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operational costs, as they are quick, agile and less costly to run as opposed to traditional teams concentrated in a single physical location. Ivancevich et al. (1990) offers that, times are changing and many organizations even in America are shifting away from traditional manufacturing oriented to service and knowledge based approach. In times such as these, work in 21st century organizations is best done through cross-functional and effective virtual teams.

Statement of the problem

In trying to establish the role of emotional intelligence on organizational effectiveness, the researcher undertook a study focusing on Nairobi Technology Hub, a unit under global IT department at Save the Children International. The technology hub was the only one of its kind within the entire organization at the time of this study and there were plans to set up other hubs in different parts of the world in future. Knowledge gathered from this research will be helpful in prepositioning leadership to support the setup of new hubs not just for Save the Children, but the aid sector in general. This will be by applying lessons learnt, adopting best practices relating to emotional intelligence and hiring of both effective employees and leaders.

Purpose of the study

The issue of virtual teams is relatively new in Kenya and specifically within the NGO sector which therefore calls for a process to examine the existing challenges and opportunities. Exploring how emotional intelligence and effective leadership work together to maximize the benefits of virtual teams and increase staff engagement is the focus of this research.

Objectives of the study

- (i) To examine the significance of emotional intelligence on the success of virtual teams.
- (ii) To establish if individual team members have a common view on leadership qualities required in virtual teams.
- (iii) To explain the role of social intelligence in virtual teams.

Research questions

- (i) How does emotional intelligence contribute to the success of virtual teams.
- (ii) What are the common leadership qualities desired in virtual teams.

- (iii) What is the role of social intelligence in globally distributed teams.

Significance of the study

There is scanty information on researches done in Kenya with specific regard to virtual teams run by international humanitarian organizations. Another reason that makes this study significant to Save the Children and other NGOs is that the virtual unit in Nairobi was at the time of research the only one under global IT structure though plans to establish similar units elsewhere were in the process. Data from this study would therefore be critical in informing the leadership of certain characteristics that will likely lead to success in other hubs from the point of knowledge as opposed to assumed perspectives.

Scope of the study

The study aimed to establish the role of emotional intelligence in identifying challenges and opportunities that are experienced in virtual teams and targeting staff from Nairobi Technology Hub at Save the Children in Kenya. The area of coverage was Kenya Country Office headquarters in Nairobi where the technology hub is located. The total number of staff in the technology hub as at the time of this study was 24 and coming from diverse backgrounds, cultures, and mixed gender and all were reached out to for data collection.

Limitations of the study

It was envisioned that few challenges and limitations would be encountered during the study and these included but not limited to the following:

- i) Some staff members not being able to take the surveys due to Internet link challenges at the time of filling in the survey.
- ii) *It was also anticipated that some members of the technology hub would fail to fill in the survey if the timing found them on travel or in other work engagements outside the office.*
- iii) The resources constraints in time required to carry out the study were insufficient and therefore made the choice of using online survey that reached as many staff as possible and with minimal cost.

Delimitations

The study did not cover general IT staff working for Save the Children offices in Nairobi due to the fact that the organizational structure for the technology hub recognizes the staff under it as part of the extended team

headquartered in London. While Kothari (2004) recommends the use of pilot studies when conducting questionnaires to test effectiveness, this study did not factor in the pilot process. This was due to limited time available to complete the study and the fact that the use of online survey makes it easy for respondents to answer closed questions based on Likert's scale.

Assumptions of the study

This study presupposed that the following would be the case:

- (i) Willingness by the staff to respond to the survey questions without coercion;
- ii) That the staff would be honest in their responses;
- iii) Reliable connectivity sufficient to allow for online surveys to be filled.

LITERATURE REVIEW

Regarding virtual teams, how they operate, their impact on effectiveness and how leadership styles affect them, Morley et al. (2015) offers that they are workgroups whose members are distributed across diverse geographical regions and organizational boundaries. They often undertake their activities using technology-assisted approaches and that partly is what enables them to execute their mission. It can then be argued that, one of the main characteristics of virtual teams is their ability to access and use technologies like the Internet and related collaboration tools as a means of communication. Indeed Morley et al. (2015) notes that despite a number of research on virtual teams and how they work, there seems to be no guide on how to implement and manage virtual teams.

Nature of virtual teams

There has been an increased interest to understand virtual teams and this has been necessitated by changing context in many organizations especially driven by globalization. Lilian (2014) notes that in globalized world with constant technological changes, leaders are faced with both opportunities and challenges in the course of trying to attain their goals. Some of the changes that leaders have to make include restructuring functions, redesigning organograms from hierarchical to flat or flexible ones. Clark and Polesello (2017) agree with this view by observing that globalization, immigration and technological changes have resulted in increased diversity in organizations and as a result, new demands in the workplace are encountered.

According to Germaine and McGuire (2014), policies and structures, cultural consideration, management

support, rewards and offering training to both leaders and workers during initial setup are some of the requirements for supporting virtual teams. Duran and Popescu (2014) add that information technology helps in the initial setup of virtual teams as they offer new working styles. Some of the areas in which virtual teams focus on include research, learning and development, knowledge management and marketing among others. Morley et al. (2015) suggests that given virtual teams operate differently from face to face setup, technology plays a key role in enabling communication and collaboration with people in diverse locations.

In this regard, Guinalú and Jordan (2016) contends that due to the temporary and spatial distribution of members in virtual teams and the fundamental use of technology as the medium of communication, it is possible to work anywhere and anytime. Additionally, it makes it possible to hire the best talent irrespective of where they are thereby encouraging flexibility, creativity and encouraging knowledge sharing among members. This perspective is also supported by Clark and Polesello (2017) who notes that diversity in teams brings positive outcomes like innovation, and competitive edge. The individuals in virtual teams according to Pitts et al. (2012) communicate using computer technology and tools like chats, email and conferencing in order to achieve their work objectives. To add to the above observation, Pitts et al. (2012) note that due to lack of face to face cues for non-verbal communication, effectiveness of exchanging information mostly depend upon the individual emotional intelligence skills. This implies that such intelligence and social awareness play a major role in ensuring effective commitment in a virtual team. The inability to use face to face human aspects lowers the quality of communication in teams which eventually affects the performance of both individual staff and their respective teams.

Role of emotional intelligence in virtual teams

One of the fundamental questions in this context of intelligence would be to ask whether success in leadership is defined more by IQ or EQ. To answer this question, Goleman (2013) notes that they both matter. However, use of IQ is usually limited to categorizing people into various careers based on their mental capability but once they get into the professions, intellectual ability becomes less of a predictor for success. Goleman further adds that emotional intelligence skills like how well we manage our emotions and relationships with other people; helps distinguish high performers in organizations. Riggio and Reichard (2008) emphasize the importance of EQ by noting that it is a critical element of effective leadership. Batool (2013) reports that, leaders who have mastered most of the aspects of emotional intelligence consistently outperform their peers. In this regard, Hejase et al. (2017) adds that it is important to emphasize how managers can use EI to

get better performance and increase staff motivation.

Research by Brackett et al. (2011) indicates that emotional intelligence includes ability to identify emotions accurately and to use it for cognitive processes like reasoning, problem solving and interpersonal communication. In addition, Oginde (2011) also notes that leaders must have the ability to listen intelligently to those with whom they work, a skill that leads to positive impact on individuals and teams. On whether emotional intelligence leads to success or failure, Hess and Bacigalupo (2013) offers that both aspiring and established leaders agree that behaviors related to emotional intelligence are characteristic of effective leaders. The effect of these behaviors is an influence on future leaders towards being more successful and Gupta and Bajaj (2017) supports this by suggesting that leader's EI facilitates a conducive climate that promotes creativity.

Such behaviors according to Oginde (2011) include having room for opinions of others, providing space for innovation and encouraging positive feedback. This is further supported by Riggio and Reichard (2008) who noted that through training, accurate assessment of information and constructive feedback, emotional and social skills of leaders can be improved. In making reference to research, Kumar (2014) notes that when two groups with identical IQ are compared, the one with higher levels of EQ tends to outperform the one with low levels. This goes to show that emotional intelligence does have an impact on the life of a leader especially when issues of performance and effectiveness are concerned.

Specifically within the context of NGOs, Hess and Bacigalupo (2013) notes that consideration for emotional intelligence skills should be part of development strategy for leaders as it helps in assessing the impact of their decisions. Additionally, the skills also help in improving the quality and effectiveness of decision making process. According to Quisenberry (2018), managing teams has never been an easy task and with the virtual teams, it is even harder. Further, it is noted from research that employees with higher EQ tend to have the ability to perform at higher levels in team environments. According to Prati et al. (2003), emotional intelligence has a positive effect on relationship management, self-awareness, motivation and empathy, all of which contributes to team cohesion.

In regards to performance, Goleman (2013) indicates that professionally successful people have a high emotional intelligence in addition to their cognitive intelligence or specialized knowledge. To support the point on social skills, Goleman notes that managers who do not improve their emotional intelligence have difficulties building relationships with peers, juniors and even clients. Kannaiah and Shanthi (2015) suggest that team building is an on-going process that helps a group to evolve into a cohesive team. Members share task expectations, support and trust one another while respecting their individual differences.

Hess and Bacigalupo (2013) observe that a lot of research focus on theoretical explanations of the role of emotional intelligence and there is a gap in practical application of these skills in decision generally and more specifically by decision makers in the NGO sector. Quisenberry (2018) suggests that when checking to see if a potential staff member will be a good fit within a self-managed virtual team, use of emotional intelligence assessment can be a good tool. Kannaiah and Shanthi (2015) add that many people are disconnected from their emotions especially strong ones like anger, fear, sadness and joy. Unfortunately, unless people understand their emotions and how they affect others, they may not be able to have effective communication especially within the work setting.

On empathy, Nauman et al. (2006) suggests that members of different cultures may have different norms, values and beliefs that may lead to misunderstanding. It is therefore critical for one to respect those from different backgrounds, perspectives and seeing diversity as an opportunity is part emotional intelligence. Kannaiah and Shanthi (2015) note that empathy is the ability to sense other's emotions, understanding their perspectives, and showing active interests in their concerns. Hess and Bacigalupo (2013) additionally observe that in settings where social and psychological expertise is relied upon, influence is best brought out through demonstration of empathy and compassion.

How leadership affects virtual teams effectiveness

Suggestions by Guinaliu and Jordan (2016) show that team management is a key factor in determining the success of an organization. According to Ambrose et al. (2009), there is a lot of research on traditional leadership but the applicability of the theories on virtual settings require a more in-depth research. Kannaiah and Shanthi (2015) offer that optimism is a culture that is nurtured by the leadership, sustained by everyone and it is powerfully motivational. It is the tendency to look at the bright side of things and expecting the best out of every situation. Furthermore, Lilian (2014) notes that leaders make a critical difference in the performance of teams and they motivate virtual team members to be flexible enough to respond to changing environments. This allows for adoption of adaptable working arrangement, use of latest knowledge and consideration for latest technologies.

Inspiration and motivation are some of the key factors that make leaders effective in leading teams and according to Savel and Munro (2016), as people move up the career ladder; they need to keep up the passion while learning to moderate our emotions. In addition, leaders should have a comprehensive understanding of their emotions and an ability to assess those of others in order to know when to motivate them. Goleman (2013) suggests that managers need to check their moods

because how they feel ultimately influences the way they communicate with others. Additionally, general mood does affect communication effectiveness in teams and this in turn influences the performance of an organization.

Transformation leaders as observed by Gomes (2014), impact others by introducing changes in their social and work environments, while also influencing the values and behaviour of their followers. Indeed, leadership definitions emphasize on the key role of leaders as being to influence others. In this regard, when organizations are dealing with competition, reduced resources and other challenges, leaders play a critical role in ensuring survival. Lilian (2014) notes the main reason virtual teams are formed is to overcome geographical limitations, cut costs in time, travel and office space. Virtual teams also help in unifying functions within a global organization while at the same time, providing opportunities to recruit people with the right skills across regions.

According to Bass et al. (2003), transformational leadership involves influencing, inspiring, motivating and mentally stimulating others. It is about leaders describing the goals to their followers in an attractive and convincing manner. Morales et al. (2008) add that transformational leaders influence the fundamental attitudes and assumptions of organization's members, thus creating a common mentality of achieving the set goals. Furthermore, they suggest that such leaders manage organizations as a system where information and knowledge flows especially in the context of knowledge driven economies.

Another important observation on transformational leadership is by Chou et al. (2013) who notes that a team leader plays a central role in determining the performance of a group. This is the kind of leadership that creates valuable and positive changes in the lives of followers. This may happen through trust in leadership and a sense of collective efficacy which are critical success factors for leadership. Trust in this case is applicable to both the leader and colleagues leading to increased team engagement and cooperative behaviors. Moynihan et al. (2011) in their research discovered that indeed leadership matters in relation to performance but there are still gaps in determining how that happens. This observation is in part the reason for this exploratory study where in particular, the author intended to establish what other studies have discovered in relation to transformational leadership.

In his studies, Hogue (2015) citing Burns (1978) notes that transformational leadership focuses on uplifting the morale of employees and is firmly grounded on morals. This differs with transactional style, which mainly pays attention to exchange of work mainly for self-interests. He suggests that transformational leadership seeks to change organizational culture and influences values by going beyond rewards and incentives. In support of this view, Ahmad et al. (2014) observe that motivation is a

factor that internally and externally cause someone to enthusiastically engage in acts that lead to desired outcomes. Leadership style in this regard contributes a great deal in making it possible for employees to have that enthusiasm while executing work.

According to Morales et al. (2008), transformational leadership usually affect innovative behavior positively. This observation therefore connects well with the very objective of this study where upon the presumption is that leadership style influences performance and effectiveness of virtual teams and by extension, an expectation to be innovative. Ahmad et al. (2014) agrees with this perspective by adding that transformational leaders motivate staff in new ways, making them think creatively and encouraging good decision-making. Bosch (2013) indicates that transformational leadership encourages employees to solve problems independent of their leader and they constantly challenge them to interrogate their value system. Bass et al. (2003) concurs with this view by adding that leaders emphasize the importance of values at work and in regards to innovation, they allow staff to brainstorm on issues without criticism for mistakes. This approach allows individual perspectives to be captured while promoting active participation by all.

Challenges and opportunities with virtual teams

According to Gazor (2012), activities of most organizations have increasingly become more global and with competition from both local and international markets, the focus is now shifting from production towards service. Nydegger and Nydegger (2010) adds to this by noting that indeed many organizations are struggling and as such, trying to find new innovative ways of remaining competitive and efficient. In such situations then, consideration for use of information technologies becomes necessary. Guinalú and Jordan (2016) notes that as a result of the advanced nature of these emerging technologies, organizations find solace in adopting them in order to allow for flexibility. The end result being that knowledge is created and shared with ease, and more skills built within virtual teams without the limitation of distances.

Integrating technology in management practices is one way of increasing efficiency and effectiveness in organizations. Based on research conducted in Sweden, Ask et al. (2012) observe that enterprise information systems like ERPs are the backbone of organizational value creation process but alone they are not enough to guarantee efficiency. As such, Hejase et al. (2014) offers that knowledge sharing is equally an important factor for consideration. Siebers et al. (2008) support this notion by observing that operational management focuses on systems like ICT, total quality management and lean production practices among other factors to increase

efficiency. However, Dube and Marnewick (2016) offers that even though there has been an increased interest in virtual project teams, there is not much data that shows how such team's performance can be improved.

In order to promote creativity, Dul and Ceylan (2011) suggests that, organizations should set the right work environment and avoid limiting employees to strict regulations, formal structures, and routine tasks otherwise they will not be stimulated enough. Cekmecelioglu and Gonsel (2013) agree with this idea by suggesting that work climate has the potential to enhance or curtail innovativeness besides the characteristics of individual workers. Serrat (2017) adds that through communities of practice enabled by communications technologies, employees are offered collaborative opportunities to share ideas and experience intellectual challenges while fostering mutual trust. Technology as noted by Lilian (2014) allows staff from various units, functions, cultures and regions of the world to share ideas and exchange information on new technologies and best practices.

According to Guinalú and Jordan (2016), virtual teams allow for various project phases to be relocated across regions while ensuring that members remain connected to the project progress irrespective of their geographical locations. Lilian (2014) supports this view but adding that communication technologies have enabled creation of new mechanisms of coordinating work, encouraging collaboration and good work practices. As suggested by Olariu and Aldea (2014), a business process management is a set of methods, tools and technologies used to design and control operational business processes. The process helps in interrelating tasks that transform inputs into outputs as executed by people or systems.

One of the challenges that come with use of virtual teams according to Guinalú and Jordan (2016) is team leadership as it plays an important role in the success of a virtual team. However, he adds that issues of trust and communications barriers are fairly expected and leaders must adopt ways of dealing with such issues. Related to the challenges of communication in virtual teams, Gonclaves et al., (2014) observes that even though there are many communication tools used in virtual teams, there has not been many studies to confirm their global efficiency. The new challenge therefore for coping with the business requirements remains how to use the philosophy of effectiveness and efficiency. Other factors that affect communication as suggested by Yu (2015) includes leadership, trust, technology, culture, language, communication channel and frequency.

THEORETICAL FRAMEWORK

It is suggested by Imenda (2014) that a theory can be defined as a set of interrelated propositions and concepts

that present a systematic point of view for relationships between variables. In this regard, a theoretical framework therefore refers to the theory or set of theories that a researcher chooses to guide his or her research. In this regard, a theoretical framework becomes a structure upon which researchers explain the data analysis and interpretation of key findings. Kothari (2004) notes that reviewing existing literature helps a researcher to establish if there are known gaps in existing theories, findings and how that affects the problem being studied. In this study, emotional intelligence and transformational leadership theories are considered in relation to how the two affect virtual teams' effectiveness.

Burn's theory of transformational leadership

The theory of transformational leadership according to Burns (1978), describes an approach in which leaders work with teams to identify needed change, and guides the process through a vision and inspiration. It works by bringing about change through motivation and commitment by team members. According to Burns, transformational leadership is a process in which leaders and followers help each other to reach a higher level of morale and motivation. It is suitable for bringing about change. It helps to enhance organizational innovation by creating a compelling vision and providing an environment that supports exploration, experimenting and sharing of ideas. It is also as suggested by Ivancevich et al. (1990) about motivating followers to work towards goals as opposed to short-term satisfaction. Key to this theory is the leaders will to make changes to the structure and culture while allowing people to be creative through mental stimulation. Bass et al. (2003) describes the four main constructs of transformational leadership as idealized influence where leaders are admired, respected and trusted. Inspirational motivation where leaders behave in ways that motivate others, intellectual stimulation in which case leaders encourage followers to be innovative and learn to solve problems in new ways. Finally, individualized consideration where the leader acts as coach, mentor in creating new, and supportive opportunities.

Goleman's emotional intelligence theory

The theory by Goleman (2013) offers that emotional intelligence plays a bigger role in determining the success of a leader. He further adds that, people with a strong self-awareness are generally honest and understand how their emotions affect themselves and others. Goleman further defines emotional intelligence as the ability to identify, assess and control one's own emotions, the emotions of others and those of groups. The five main components of emotional intelligence are

considered to be self-awareness, self-regulation, empathy, social skills and motivation. Furthermore, Salovey and Mayer (1990) suggest that emotional intelligence is a subset of social intelligence that involves the ability to monitor one's own and others' emotions and feelings, to discriminate among them and use it the information in guiding the thoughts and actions.

METHODOLOGY

This research involved a mix approach of qualitative and quantitative methodologies. A qualitative method is according to Kothari (2004) applicable to phenomena that is concerned with quality. The mix approach makes it possible to measure outcomes in aspects like frequency and percentage of occurrence, attitudes and opinions about emotional intelligence and leadership. Kothari recommends that research designed to find out how people feel and think about a subject is qualitative and the assessment of behaviour is done through insights and impressions. On the other hand, Hejase and Hejase (2013) suggest that quantitative analysis using several Likert scale helps to quantify attitudinal and behavioural inputs so as to assess the concepts under study. This research therefore was guided by the aforementioned observations in seeking individual perspectives from technical experts through a survey which according to Leedy and Ormrod (2014), is considered part of a qualitative approach. On the other hand, according to A. Hejase and Hejase (2013), survey is also considered a quantitative research instrument.

Research design

The research followed a descriptive design involving qualitative and quantitative aspects of data collection and specifically following an embedded design as suggested by Leedy and Ormrod (2014). To collect the information accurately from the staff of Save the Children's technology hub, an online questionnaire was administered through the internet. The method helped to reduce the cost of data collection while also factoring in the time constrains. Besides the low cost, Kothari (2004) notes that the approach is convenient and free from interviewer bias.

Target population, location and sampling

The target population included staff at Save the Children office in Nairobi and specifically those working at the technology hub, which was then, the only technical virtual team within the organization. Purposive sampling technique was therefore used due to the uniqueness of the team and the required data. The approach is supported by Etikan et al. (2016) who observes that purposive sampling as a non-probability technique is a deliberate choice of the researcher due to the qualities participants possess. The employees were reached out to without any gender, age, position and ethnic discrimination as per sample frame in Table 1.

This non-probability sampling approach is also based on a suggestion by Kothari (2004) that in purposive sampling, items for the sample are conveniently determined by the researcher according to appropriateness. For this reason, and based on suggestion by Etikan et al. (2016), the entire target population was considered as a sample given the small size of probable number of respondents. According to Mugenda and Mugenda (2003), respondents who meet certain criteria like age range, literacy level or other characteristics of value to the study may be considered.

Leedy and Ormrod (2014) further suggest that the ability to use computers and Internet systems is a key factor for consideration when considering use of online surveys. According to Etikan et al. (2016), non-random sampling techniques do not require underlying theories for sample size calculation and the researcher determines what is appropriate based participants knowledge and expertise. Therefore, the questionnaire link was sent out to the 24 staff of Save the Children's Nairobi technology hub based in Kenya and valid feedback was only received from 19 respondents representing a 79% response rate.

Data collection methods, types of data and procedures

The research laid emphasis on primary data sources since there was lack of evidence that similar research involving Save the Children's technology hub in Kenya had been carried out before. In support of this basis, Mugenda and Mugenda (2003) advises on discretionary judgment as determined by the appropriateness of the data being sought. Given that the study followed a descriptive design, the data was collected through online questionnaires to staff using *Survey Monkey* tool. According to Nagalakhmi and Trivedi (2015), online survey tools including survey monkey are suitable for both academic and market research since data collected can easily be exported to other formats for further analysis and translation. According to Regmi et al. (2016), with the increased access to the Internet, use of online data collection techniques has become popular. In comparison with other methods of collecting data where face to face interactions are required, Kothari (2004) notes that the friendliness of the interviewer and respondents is not required.

Descriptive research according to Mugenda and Mugenda (2003), determines and reports things as they are and in this case, describing values, characteristics, behaviours and attitudes. Furthermore, according to Hejase and Hejase (2013: 272), "descriptive statistics deals with describing a collection of data by condensing the amounts of data into simple representative numerical quantities or plots that can provide a better understanding of the collected data." Therefore, this study analyzed data collected with descriptive statistics such as frequencies and percentages supported with diagrams for clarity.

Ethical considerations

Ethical considerations in research as advised by Mugenda and Mugenda (2003) were observed including confidentiality for information shared during data collection. The respondents involved were not required to disclose their identity by way of name, identity number or employee number. This was done to ensure anonymity and that their integrity in relation to information shared was not in any way compromised. Saunders et al. (2007) suggests that the design of any research should be in such a way that participants are not subjected to embarrassment. According to Lune and Berg (2017), confidentiality involves removing from the research records, any elements that might be used to positively identify subjects and in this case, there were not such particulars.

DATA ANALYSIS, FINDINGS AND DISCUSSION

The questionnaire used several types of questions including dyadic (Yes and No), multiple choice and 5-level Likert's scale in order to get insights and perspectives from staff based on the main research objectives. This design of questionnaire is supported by

Table 1. Sampling frame.

Location	County of operation	Target population	Sample proportion (Staff on email)	Sample size (%)
Nairobi Office	Nairobi	24	24	100

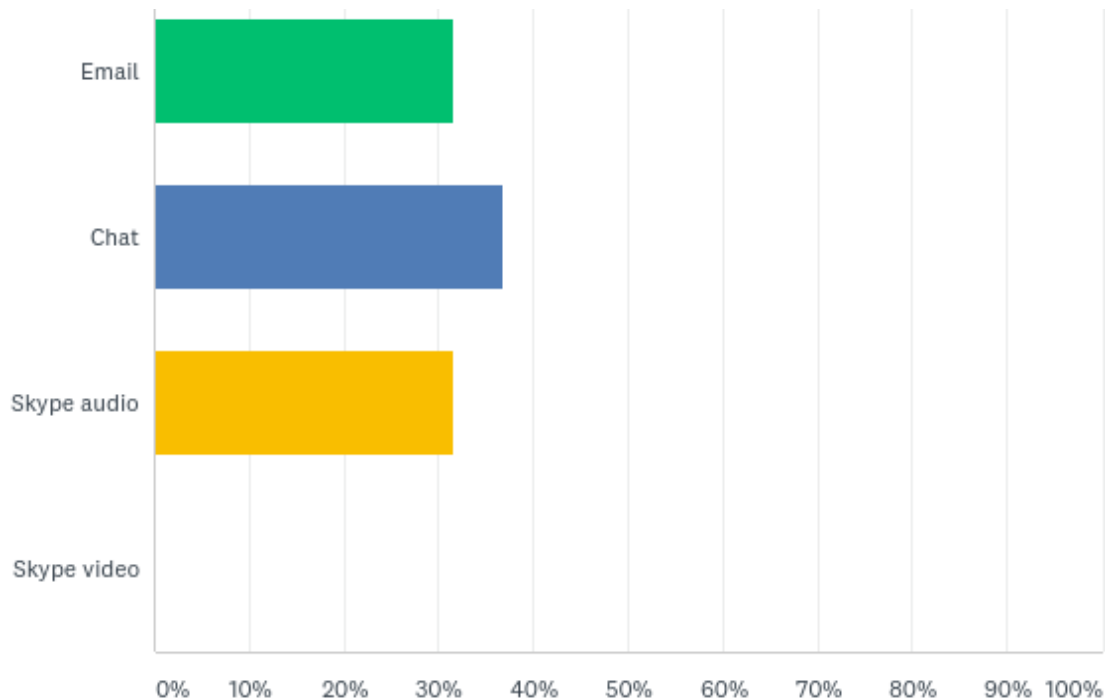


Figure 1. Frequently used channels of communication.
Source: Author (2018).

Barua (2013) who notes that Likert's is a psychometric scale commonly used in research based on survey questionnaire. Willits et al. (2016) also supports the use of Likert's scale noting that it is a common tool for measuring attitudes based on the degree to which participants agree or disagree with certain statement. To ensure feelings and opinions beyond the structured statements were captured, open-ended questions were also incorporated.

Data analysis

Data analysis followed approaches recommended by Mugenda and Mugenda (2003) where information collected through unstructured questions was organized in themes and concepts. This helps to bring out perspectives following considerations for subjective opinions and attitudes. Mugenda and Mugenda adds that in qualitative approaches, data collection and analysis happen concurrently with computer tools only helping in organizing data sets. Analysis was done using both the

online survey tool capability and Excel as a software in order to produce descriptive and inferential statistics.

Results show that in terms of gender distribution, females constituted 31.58% (6 out of 19) of the respondents and 68.43% (13 out of 19) were male respondents. Concerning the frequently used mode of communication when engaging with business users, the results were as depicted in Figure 1. This figure shows that around 31% of the respondents used equally the Skype audio and emails while 38% used chat.

Social skills

From the analyzed data, of all the participants who were asked to indicate if they had encountered some level of miscommunication, 53% of all the respondents confirmed that they did encounter miscommunication while 43% did not. The staffs were also asked to rate their listening ability on a scale of five measures between very good and very poor. The results show that 94.74% of the respondents rated good to very good in their listening ability (Table 2).

Table 2. Level of listening ability.

Scale	Responses in %	Number of respondents
Very good	52.63	10
Good	42.11	8
Acceptable	5.26	1
Poor	0.0	0
Very poor	0.0	0
Total	100	19

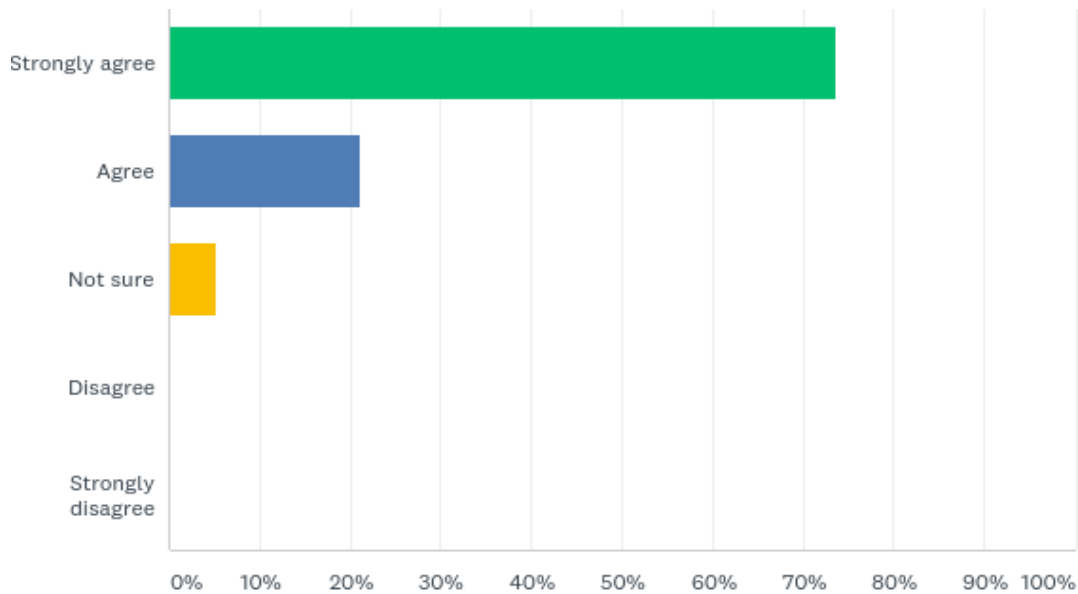


Figure 2. Role of diversity in virtual team success. Source: Author (2018).

Table 3. Likelihood of considering different opinions.

Scale	Responses in %	Number of respondents
Very likely	63.16	12
Likely	36.84	7
Neither likely nor unlikely	0.0	0
Unlikely	0.0	0
Very unlikely	0.0	0
Total	100	19

Empathy

On whether members of the Nairobi technology hub considered diversity as beneficial to the success of the team, 74% strongly agreed, 21% agreed and 5% representing one participant was not sure. None disagreed on the role of diversity in the virtual team as depicted in Figure 2. Equally, in regards to whether the individual staff members would consider the opinions of

others even if they conflicted with their own, 100% of the respondents indicated they would either likely (36.84%) or very likely (63.16%) do as shown in Table 3.

Self-awareness and self-regulation

The participants were asked to rate their level of self-awareness on a scale of five with very good being

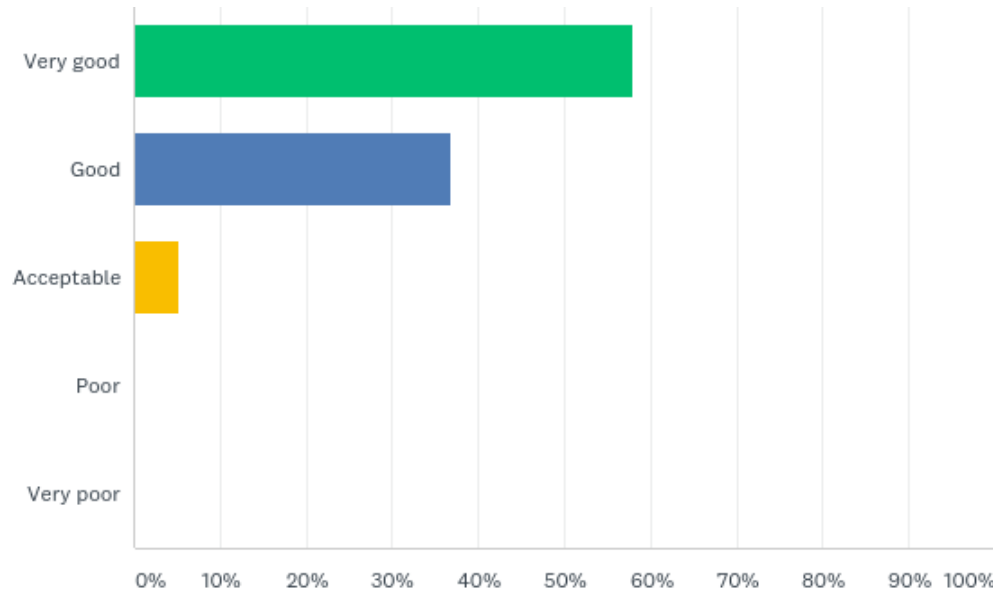


Figure 3. Level of self-awareness.
Source: Author (2018).

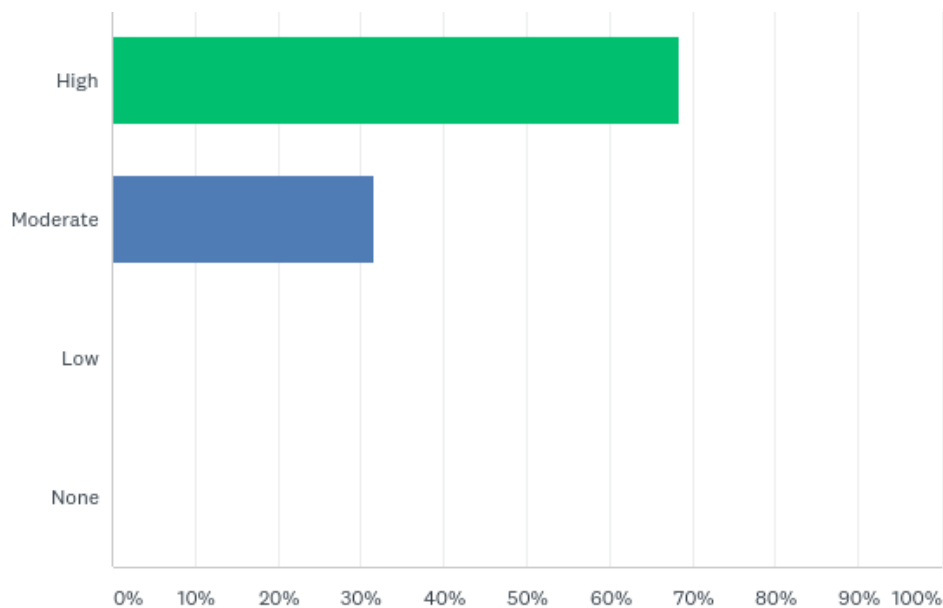


Figure 4. Sense of effectiveness as a member of virtual team.
Source: Author (2018).

highest and very poor as lowest (Figure 3). About 93% of the respondents rated themselves as between good and very good with only one participant rating as acceptable as shown in Table 5. Overall, about 58% of all respondents indicated that they considered emotional intelligence as very important in their role, while 42% felt it is just important. None of the respondents however

expressed that they did not consider emotional intelligence as important in their role. In regards to the degree in which participants felt effective in being members of a virtual team, 68% indicated they felt highly effective while 32% stated they felt moderately effective (Figure 4). On the other hand, 31.55% of the respondents confirmed they encountered situations that challenged

Table 4. Encounter with situations challenging self-control.

Answers	Responses in %	Number of respondents
Yes	31.58	6
No	68.42	13
Total	100	19

Table 5. Essential leadership skills for virtual teams.

Theme	Key words	Number of respondents	Percentage
Communication	Good communication	14	73
	Good communicator		
	Effective communication		
	Communication		
	Clear communication		
	Good listener		
Character (About Self)	Listening	13	68
	Honest		
	Accountable		
	Open		
	Trustworthy		
	Responsible		
Character (About Others)	Integrity	11	57
	Empowering		
	Motivating		
	Inspiring		
	Delegating		
	Engaging		
	Guiding		

their self-control as shown in Table 4.

Leadership qualities desired in virtual teams

The participants were asked to state some of the leadership skills they considered essential for running a virtual team and the results were analyzed in themes as shown in Table 5.

Conclusion

From the analyzed data, it is clear that slightly over 52% of staff working in the Nairobi technology hub, a virtual team within Save the Children had encountered miscommunication with technology users in the course of their work. As suggested by Guinalú and Jordan (2016), this then goes to show that people working in virtual teams especially where they interact with others remotely,

are prone to communication challenges. There is also compelling evidence that emotional intelligence is important for members of virtual teams as demonstrated through the results where all the research subjects indicated that they either agreed or strongly agreed.

In regards to specific aspects of emotional intelligence like empathy, social skills, self-awareness and self-regulation, the feelings expressed by majority of the participants were in favor of the fact that the skills positively affected their effectiveness and satisfaction. In this regard, up to 68% expressed that they felt more effective being part of a virtual team and that 73% strongly held a view that diversity was instrumental to the success of the team. Pertaining leadership, the key skills mentioned as being essential to the running of a virtual team were categorized into themes. It was observed that strong communication skills appeared to be a must have for leadership with 73% of respondents mentioning it as a key skill. This aligns well with an earlier observation noted from research by Gonclaves et al. (2014) that one

of the major challenges virtual teams face is lack of effective communication since there is little or none face to face interaction.

Generally, all the critical leadership skills mentioned pointed towards strong character and values like honesty, openness, integrity, accountability and responsibility. Others were inspiring, motivating, guiding, engaging and empowering all of which are associated with transformational leadership style. This observation is in agreement with the theory of transformational leadership by Burns where Stewart (2006) notes that transformative leaders tend to motivate, encourage and inspire their followers.

Even though findings from previous research by other scholars was limited in demonstrating what makes virtual teams effective, the results of this study demonstrates that emotional intelligence plays a role in the individual members of such a team. Those surveyed also strongly indicated that the emotional intelligence and transformational leadership skills are also relevant for overall success of a virtual team. These observations are in line with an argument by Goleman (2013) that emotional intelligence serves as a differentiating factor for performance and effectiveness.

RECOMMENDATIONS

Given that just about half of the staff surveyed indicated that they had faced miscommunication in the course of their work, there is a fair chance that people working in virtual teams would highly benefit from capacity building on effective communication skills. Training to upscale the self-awareness skills for those working in virtual team would be another potential area that needs to be given attention. This is arrived at by the observation that close to 40% of those studied had their self-awareness at between acceptable to good indicating there is a room for improvement.

Areas for further research

This study did not investigate the extent to which gender and length of experience may be affected by emotional intelligence and leadership styles leading to effectiveness in a virtual team setting. Besides a good number of staff having indicated that they encountered situations that challenged their self-control, their ability to handle the situation was not explored. This provides room for further research on how to establish the virtual team member's capability to manage conflicts related to self-control as the study only assessed the level of awareness.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

REFERENCES

- Ahmad F, Abbas T, Latif S, Rasheed A (2014). Impact of transformational leadership on employee motivation in telecommunication sector. *Journal of Management Policies and Practices* 2(2):11-25.
- Ambrose P, Chenoweth J, Mao E (2009). Leadership in virtual teams: The case for emotional intelligence. *Americas Conference on Information Systems 2009 Proceedings* 626. Available at: <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1602&context=amcis2009>
- Ask U, Magnusson J, Frisk E (2012). Improving effectiveness and efficiency in large Swedish firms through AIS. Available at: https://www.cfa.handels.gu.se/digitalAssets/1438/1438614_mmw-project.pdf
- Barua A (2013). Methods for decision making in survey questionnaires based on Likert scale. *Journal of Asian Scientific Research* 3(1):33-38.
- Bass B, Avolio B, Jung D, Berson Y (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology* 88(2):207-218.
- Batool B (2013). Emotional intelligence and effective leadership. *Journal of Business Studies Quarterly* 4(3):84-94.
- Bosch D (2013). The impact of transformational leadership on leader-follower work value congruence. *International Journal of Business and Social Research* 3(8):17-31.
- Brackett M, Rivers S, Salovey P (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass* 5(1):88-103.
- Burns JM (1978). *Leadership*. New York, USA: Harper & Row.
- Cekmecelioglu H, Gunsel A (2013). The effects of individual creativity and organizational climate on firm innovativeness. *Social and Behavioral Sciences* 99(9):257-264.
- Chou H, Lin Y, Chang H, Chuang W (2013). Transformational leadership and team performance: the mediating roles of cognitive trust and collective efficacy. *Sage Open* 3(3):2158244013497027
- Clark J, Polesello D (2017). Emotional and cultural intelligence in diverse workplaces: getting out of the box. *Industrial and Commercial Training* 49(7/8):337-349.
- Dube S, Marnewick C (2016). A conceptual model to improve performance in virtual teams. *South African Journal of Information Management* 18(1):1-10.
- Dul J, Ceylan C (2011). Work environments for employee creativity. *Ergonomics* 54(1):12-20.
- Duran V, Popescu A (2014). The challenge of multicultural communication in virtual teams. *Social and Behavioral Sciences* 109:365-369.
- Etikan I, Musa S, Alkassim R (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics* 5(1):1-4.
- Gazor H (2012). A literature review on challenges of virtual team's leadership. *Journal of Sociological Research* 3(2):134-145.
- Germaine ML, Mcguire D (2014). The role of swift trust in virtual teams and implications for human resource development. *Advances in Developing Human Resources* 16(3):356-370.
- Goleman D (2013). What makes a leader: Why emotional intelligence matters. More than sound. Available at: <https://cds.cern.ch/record/1692351>
- Gomes AR (2014). Transformational leadership: Theory, research and application to sports. pp. 53-114.
- Gonclaves P, Ferreira L, Gonclaves J, Putnik G, Cruz-Cunha M (2014). Direct communication versus virtual communication in virtual teams. *Procedia Technology* 16:3-10.
- Guinaliu M, Jordan P (2016). Building trust in the leader of virtual teams. *Spanish Journal of Marketing* 20:58-70.
- Gupta R, Bajaj B (2017). The relationship between leader's emotional intelligence and employee creativity: A conceptual framework of mechanism. *Procedia Computer Science* 122:471-477.
- Hejase A, Hejase H (2013). *Research Methods: A Practical Approach For Business Students* (2 Ed.). Philadelphia, Pa: Masadir Incorporated, 2013.
- Hejase H, Haddad Z, Hamdar B, Rola A, Hejase A, Beyrouti N (2014).

- Knowledge sharing: assessment of factors affecting employee motivation and behaviour in the Lebanese organizations. *Journal of Scientific Research and Reports* 3(12):1549-1593.
- Hejase H, Hamdar B, Noureddin M, Hejase A, Nsouli F (2017). Assessment of the relationship between managers' emotional intelligence and employees' motivation. *The Journal of Middle East and North Africa Sciences* 3(4):27-47.
- Hess JD, Bacigalupo AC (2013). Applying emotional intelligence skills to leadership and decision making in non-profit organizations. *Administrative Sciences* 3(4):202-220.
- Hogue RT (2015). Transformational leadership for virtual teams in an information technology organization. Available at: <http://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=2196&context=dissertations>
- Imenda S (2014). Is there a conceptual difference between theoretical and conceptual frameworks? *Journal of Social Sciences* 38(2):185-195.
- Ivancevich JM, Matteson MT, Konopaske R (1990). Organizational behavior and management. Available at: http://www.academia.edu/download/61483596/book_10_edition20191211-121005-1yj6hma.pdf
- Kannaiah D, Shanthi R (2015). A study on emotional intelligence at workplace. *European Journal of Business and Management* 7(24):147-154.
- Kothari CR (2004). *Research Methodology: Methods and Techniques*. Jaipur: New Age International Publishers.
- Kumar S (2014). Establishing linkage between emotional intelligence and transformational leadership. *Industrial Psychology Journal* 23(1):1-4.
- Leedy P, Ormrod J (2014). *Practical research planning and design*. Essex: Pearson Education Limited.
- Lilian S (2014). Virtual teams: opportunities and challenges for e-leaders. *Social and Behavioral Sciences* 110:1251-1261.
- Lune H, Berg B (2017). *Qualitative research methods for social sciences* (9th Ed.). Essex, England: Pearson.
- Morales V, Montes F, Jover A (2008). The effects of transformational leadership on organizational performance through knowledge and innovation. *British Journal of Management* 19:299-319.
- Morley S, Cormican K, Folan P (2015). An analysis of virtual team characteristics: A model for virtual project managers. *Journal of Technology Management and Innovation* 10(1):188-203.
- Moynihan D, Pandey S, Wright B (2011). Setting the table: How transformational leadership fosters performance information use. *Journal of Public Administration Research and Theory* 22:143-164.
- Mugenda O, Mugenda A (2003). *Research methods: Quantitative and qualitative approaches*. Nairobi: Acts Press.
- Nagalakhmi R, Trivedi M (2015). Utilization of online survey tools for academic research: A practical approach to survey monkey. *The International Journal of Research Publications* 4(3):21-28.
- Nauman S, Elahi M, Bhatti Z, Khalid U (2006). Role of emotional intelligence in virtual project management. Paper presented at the Servant Leadership and Project Outcomes. Available at: <https://www.researchgate.net/publication/224679534>
- Nydegger R, Nydegger L (2010). Challenges in managing virtual teams. *Journal of Business and Economics Research* 8(3):69-82.
- Oginde D (2011). Follower expectations of a leader: Most admired leader behaviours. *International Leadership Journal* 3(2):87-108.
- Olariu C, Aldea CC (2014). Managing processes for Virtual Teams—A BPM approach. *Procedia-Social and Behavioral Sciences* 109:380-384.
- Pitts V, Wright N, Harkabus L (2012). Communication in virtual teams: the role of emotional intelligence. *Journal of Organizational Psychology* 12(3/4):21-34.
- Prati M, Douglas C, Ferris G, Ammeter A, Buckley R (2003). Emotional intelligence, leadership effectiveness, and team outcomes. *The International Journal of Organizational Analysis* 11(1):21-40.
- Quisenberry W (2018). Exploring how emotional intelligence contributes to virtual teams: Interpretive analysis of a phenomenological study. *European Scientific Journal* 14(5):19-39.
- Regmi P, Waithaka E, Paudyal A, Simkhada P, Teijlingen E (2016). Guide to the design and application of online questionnaire surveys. *Nepal Journal of Epidemiology* 6(4):640-641.
- Riggio R, Reichard R (2008). The emotional and social intelligences of effective leadership: An emotional and social skill approach. *Journal of Managerial Psychology* 23(2):169-185.
- Salovey P, Mayer J (1990). Emotional Intelligence. *Imagination, cognition and personality*, 9(3):185-211.
- Saunders M, Lewis P, Thornhill A (2007). *Research Methods For Business Students* (4th Ed.). Essex, England: Prentice Hall.
- Savel R, Munro C (2016). Emotional Intelligence: For the leader in us all. *American Journal of Critical Care* 25(2):104-107.
- Serrat O (2017). *Harnessing creativity and innovation in the workplace*. In *Knowledge solutions*. Springer, Singapore. pp. 903-910.
- Siebers P, Aickelin U, Battisti G, Celia H, Clegg C, Fu X, Peixoto A (2008). Enhancing productivity: The role of management practices. *Advanced Institute of Management Research Paper*.
- Stewart J (2006). Transformational leadership: An evolving concept examined through the works of Burns, Bass, Avolio, and Leithwood. *Canadian Journal of Educational Administration and Policy* 54:1-29.
- Willits F, Theodori G, Luloff A (2016). Another look at Likert scales. *Journal of Rural Social Science* 31(3):126-139.
- Yu T (2015). *Communication In Global Entrepreneurial Virtual Teams: A Systematic Literature Review*. (Msc In Entrepreneurship), Aalto University, Aalto University. Available at: <https://aaltodoc.aalto.fi/handle/123456789/18300>