

UTISGAD

International Journal of Commerce, Industry and Entrepreneurship Studies



ISSN: 2791-6987

Article ID: UTISGAD-2024-4-2-0210 | pp. 1-20

Article Type: Review Article

Received: 02.10.2024

Accepted: 28.12.2024

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Open-Access Policy: BOAI has been applied.

www.utisgad.org | DOI: 10.5281/zenodo.14563356

SOCIAL CONSTRUCTION OF LEADERSHIP IN VIRTUAL TEAMS: A QUALITATIVE STUDY

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ABSTRACT

New technological developments have made virtual teams a common feature of the workplace. Scholars have examined the framework of leadership within virtual teams. However, the impact of relationships on leadership in virtual teams has not been studied effectively. This study aims to understand the role of relationships in virtual teams. To achieve this aim, Uhl-Bien's (2006) Relational Leadership Theory was used as a framework. The theory claims that leadership is constructed by social relationships. Since virtual interactions differ from those in-person, it is expected that the social construction of leadership will also differ. A strategic execution software company was contacted, and interviews were conducted with eight employees. Participants were asked to discuss communication, relationships, leadership, and flexibility. To analyse data, the social constructionist approach was used. The data indicates that relationships have an important impact on leadership frameworks. Different relational dynamics cause different perceptions of leadership within a team.

Keywords: virtual teams, leadership, relational leadership, social constructionism, qualitative

JEL Classification: M00, M12

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1. INTRODUCTION

Computer-mediated communication made it possible to work with people in different cities and countries. This form of work is named virtual teams/organisations. According to a survey, 66% of multinational companies apply virtual teams in their organisations (Minton-Eversole, 2012). Traditional face-to-face teams still keep their importance. However, an increasing number of studies focus on virtual teams (Gilson et al., 2014). Since they do not share the same space, there may be some differences between traditional and virtual teams in terms of the processes and social interaction, which led scholars examine the effectiveness of virtual teams (Kock and Lynn, 2012; Maynard et al., 2012; Cramton and Webber, 2005; Schweitzer and Duxburry, 2010).

Leadership in a virtual team can be seen as another important field in terms of social interaction. Scholars examine leadership in virtual teams regarding networks, leader's competence, electronic communication etc. (e.g. Avolio et al., 2001; Golden et al., 2008). For example, Avolio and his colleagues (2014) name leadership in virtual teams as e-leadership and claim that e-leadership transforms organisations in several ways, such as increasing use of AIT (advanced information technology), more transparent and open processes, the rise of social networks, constant communication and tracking.

Although scholars have studied leadership in virtual teams and have been building theories and frameworks, it can be postulated that in most of them, the role of followers or team members is ignored. As Uhl-Bien and Carsten (2007) state, leadership can be seen as a social construct built by both the leader and the follower. This view offers a new perspective on leadership. Current leadership theories mainly focus on the leader and see the followers as a passive entity in organisations.

According to Uhl-Bien's (2006) relational leadership theory, relational processes can be identified as leadership when they result in social order and new approaches or aims. In other words, relational leadership can be seen as a social influence process that allows coordination (i.e., social order) and change (i.e., new approaches and goals) within the organisation (Uhl-Bien, 2006). It should also be noted that relational leadership is not a trait or character of a leader, but an aspect created by the individuals through social interaction (Fairhurst, 2007).

As has been previously mentioned, the definition of work is changing since information technology has made it possible to work in virtual teams. It can be said that leadership literature is mainly based on traditional organisations (i.e., face-to-face teams). Therefore, detailed research of leadership in virtual teams is needed. It can also be claimed that relational leadership theory can be a good framework to examine leadership in virtual teams because of the special dynamics of relations in virtual teams (e.g., communication through internet).

Increasing use of virtual teams in organisations makes it necessary to explain the dynamics of leadership in virtual teams with practical concerns as well. The changing workplace environment may create some problems as Sennet (1998) states in his book "The corrosion of character: the personal consequences of work in the new capitalism", such as increasing uncertainty of flexible work. Virtual teams can be seen as the highest point of flexible work because it allows work outside of the workplace. It is important to understand virtual teams to solve these possible counter effects.

Hence, the main purpose of this present study is to explore leadership in virtual teams. To achieve this goal, two main aspects of relational leadership theory will be examined in virtual teams (coordination and change). The research questions are formulated as:

- 1) What is the role of informal relations (i.e. social network websites) on the construction of leadership in virtual teams?
- 2) How does frequent communication affect leader member relations in virtual teams?
- 3) How effective do the relationships define the roles and norms in virtual teams?

This paper starts with a literature review exploring what has been said about leadership in virtual teams. Various studies about virtual teams and relational leadership will be evaluated. This will be followed by a methodology section which focuses on the how the subject is evaluated and the rationale behind it. The next section will be an analysis of interviews made with virtual team members. The last part of the paper will be a conclusion including limitations and recommendations.

2. LITERATURE REVIEW

2.1 Virtual Teams

Teams are a common and essential part of work (Hackman, 2002). A team can be defined as a group of individuals who come together to solve a problem or to achieve a common goal (Berry, 2011). This definition is a sample of the generally accepted definition of team and teamwork.

On the other hand, definitions of virtual teams can vary from one author to another. For instance, a virtual team can be defined as "technology supported working" because communication within a team is mainly provided by advanced information technology (Anderson et al., 2007). Peters and Manz (2007) focus on virtual team members' being geographically dispersed. This dispersion may be in terms of geography, time, and organisation (Powell et al., 2004). Another definition claims that virtual teams are not permanent, and the team size is smaller than traditional teams (Cascio and Shurygailo,

2003). Most of the definitions focus on first, having dispersed members and secondly using technology for communication.

Virtual team research has reached a certain level allowing us to examine the subject in depth. Existing literature shows different aspects of virtual teams. For instance, researchers have been studying team virtuality (e.g., de Guinea et al., 2012), technology (e.g., Duranti and de Almeida, 2012), leadership (e.g., Henderson, 2008), and trust (e.g., Golden and Raghuram, 2010).

There is also a considerable amount of research comparing face-to-face and virtual teams. Increasing interest and use of virtual teams made scholars compare both team types. Virtual teams are considered beneficial in terms of savings due to reducing travel costs and other logistic expenditures (Robbins and Judge, 2007). These teams are considered more flexible than traditional teams because they allow the organisation to manage the pressure caused by globalisation and rivalry (Avolio et. al., 2001). However, there is no consensus about the efficiency of virtual teams. Some researchers (e.g. Gibbs, 2009) claim that face-to-face teams are more efficient while others (e.g. De Guinea et. al., 2012) believe the opposite (Purvanova, 2014).

As a result, it can be said that virtual team research keeps its importance, and it seems that researchers have different opinions about virtual teams. It may be expected that the research will achieve common definitions and universally accepted aspects of virtual teams, as the quantity of research increases. It is also expected that while defining the notion of virtual teams, researchers will conduct more in-depth analysis about the different dimensions of virtual teams.

2.2 Leadership in Virtual Teams

The leadership field is one of the popular research interests in virtual team literature. Leader behaviour and traits can be listed as the two main areas examined by scholars (Gilson et. al., 2014). Transformational leadership in virtual teams arise from the personal characteristics of the leader and communication factors within the team (Balthazard et. al., 2009). It is also stated that transformational leadership can increase satisfaction and motivation in virtual teams (Purvanova and Bono, 2009). Leadership is also important to sustain trust and cohesion in virtual teams (West, 2012). Wise (2013) states that leader characteristics, such as conscientiousness, communication skills and self-management are needed for an effective virtual team.

There are also different approaches to leadership in virtual teams. For instance, Lipnack and Stamps (1997) state that virtual teams are constructed based on competency, mostly due to needing advanced information technology for communication. This may result in lack of need of leaders in virtual teams. It is also claimed that because virtual teams have members from different departments or areas, virtual team leadership tends to be shared (Lipnack and Stamps, 1994). It can be said that according to this approach, virtual teams

and organisations are considered to be knowledge based and shared leadership is recommended for an efficient team.

E-leadership theory is perhaps the most cited theory of leadership in the virtual team research area. Avolio and his colleagues (2001) examine virtual teams and suggest a new leadership model for virtual teams. According to this theory, leadership in teams is affected by increasing the use of technology and leaders' use of technology affects the process and others in the team (Avolio et. al., 2014). E-leadership can be defined as the social influence process through advanced information technology, which changes attitudes, behaviour, and performance in a team (Avolio et. al., 2014). It should be noted that, although e-leadership theory considers leadership a "social influence process", it mainly focuses on behaviour and attitudes of the leader.

An e-leader is seen to be a creator and supplier of technology in the team according to this theory (Avolio et. al., 2001). However, it is also accepted that technological devices and websites can be created or supplied by group members rather than leaders. Avolio (2014) gives the example of the "Arab Spring" in which the demonstrations were launched by leaderless crowds. He draws attention to the possibility of misusing technology to destabilise populations (Avolio et. al., 2014).

E-leadership is stated as the initiator of change in a virtual team or organisation (Kahai, 2013). According to this theory, e-leadership causes increasing use of information technology, more transparent and open organisations, rising social networks, constant communication and increasing use of tracking devices (Avolio et. al., 2014). These effects are propounded as benefits of e-leadership. For instance, constant contact is claimed to improve team performance by instant guidance and feedback (Kahai, 2013). However, this can also be interpreted as having constant control on team members, which may lead to loss of motivation. Agility does not always mean making the right decisions.

Avolio and his colleagues (2014) also predicted the future of e-leadership. Some changes and developments are expected in e-leadership with constant technological improvements. For instance, embedded tracking systems, communication channels that unveil the covered emotions in the team, and the possibility of "robotic leadership" can occur in the future (Avolio et. al., 2014).

As a result, virtual leadership literature can be said to be primarily based on the leader's behaviour and traits. Scholars have been searching to discover how a leader in a virtual team can be most effective for teamwork. Most of the theories emphasise the importance of leader competency in terms of technology. It can be claimed that the role of team members is ignored in most of the studies. It seems that an approach focussing on followers in virtual teams is timely for a holistic understanding of virtual team.

3. THEORETICAL FRAMEWORK

3.1. Relational Leadership Theory

Although non-leadership scholars have been studying the role of followers in teams and organisations, its importance was ignored by leadership scholars for decades (Baker, 2007). The term “follower” itself can be seen a sign of how this field is seen by scholars in leadership studies by reflecting discourse of following the leader. Different terms can be found in the literature, such as team member, collaborator, and partner. However, follower is the most popular term in leadership literature (Jackson and Parry, 2011). Several theories can be found that consider followers, such as Fiedler’s (1967) contingency model of leadership, and Kerr and Jermier’s (1978) substitutes of leadership theory.

Relational views in leadership theory examine leadership as a social influence process (Uhl-Bien et. al., 2014). There are several approaches in this view. For instance, leadership can be seen as a product of social interaction and shaped by both leader and follower depending on the context (Lord and Brown, 2001). Another relational view is Klein and House’s (1995) charisma theory, which offers a leader’s charisma and follower’s being open to charisma is equally important for effective leadership.

Mary Uhl-Bien (2006) offers an inclusionary theory for relational views of leadership. She states that unlike former leadership studies focusing on leadership effectiveness, relational leadership theory focuses on relational processes in which individuals *create* leadership. In this theory, leaders and managers are two different entities and having the title of manager does not mean being a leader in the team (Uhl-Bien, 2006). Leadership can occur outside and even against the hierarchy in organisations (Uhl-Bien, 2003). However, relational leadership theory recognises the positional or hierarchical leadership as a type of leadership: managerial leadership (Uhl-Bien et. al., 2004).

Relational leadership examines the relations of individuals within an organisation. However, it does not only focus on dyadic (leader-follower) relations, but also on relations that include all members and in which leadership is constructed (Uhl-Bien, 2006). It should also be noted that relational leadership theory studies both relationships, which are outcomes or contexts for interactions, and relational dynamics (social construction) of leadership (Uhl-Bien et. al, 2004).

As a result, relational leadership theory can be defined as the social construction of leadership through the relationships of individuals. Coordination and change can be listed as the main focus points of relational leadership. Social construction of leadership in virtual teams is needed for holistic understanding. Due to being different from face-to-face teams, social construction of leadership can be different in virtual teams. This study aims at a better understanding of leadership in virtual teams from a relational leadership perspective.

4. METHODOLOGY

For qualitative research, a semi-structured interview has been conducted. To apply this interview, a strategy execution software firm has been contacted. The firm is headquartered in Coventry (United Kingdom) and supplies services to companies in the North America and the EU. The firm uses partial virtual teams in its work. Some of the employees work from their homes and use the Internet as their main communication channel. This fulfils the two components of a virtual team: first, having dispersed members and secondly using technology for communication (Anderson et al., 2007; Peters and Manz, 2007; Powell et al., 2004; Cascio and Shurygailo, 2003).

Within the company, 8 virtual team members have been chosen for interviews. The rationale behind this preference can be found in the literature. The nature of virtual teams limits the number of members (Bal and Teo, 2001). Although they do not give a specific number, Lipnack and Stamps (1997) state that virtual teams tend to have less members, but that these members are more active. The number of participants seems to be enough to understand the effects of relations on leadership. The present study aims to examine and explain the relations within the team and focuses on quality of knowledge rather than quantity.

The interviews were made in person to achieve a better understanding. The interviews took around 20-30 minutes. The participants had been clearly informed about the research questions, the procedure and possible outcomes before the interview started. The names of the participants are kept anonymous to provide confidentiality. In order to ensure privacy, the transcripts were sent to the participants, and they were asked for confirmation. The question, "How is it found?" is just as important as the question, "What is found?" in academic research. In addition to interviews, some websites were visited for better understanding of the firm, such as the company website and company pages in LinkedIn, Facebook, and Twitter.

The inductive analysis method is used to analyse data in order to establish a theory which explains an existing phenomenon; in inductive analysis, several categories are constantly created and clarified (Katz, 1983). Although it is difficult to reach a detailed interpretation by using this method, inductive analysis can be seen as a prelude to develop a hypothesis upon these constructs (Carsten et. al., 2010). It can be said that this method is suitable to understand the role of relations on leadership in virtual teams.

The analysis project started with the first interview and finishes after all data has been categorised and examined. The data was classified after being collected and the categories were updated as more data is accumulated. This coding process is expected to uncover possible patterns or common perceptions of participants about the effects of relations. It may also be beneficial to understand the role of relationships in virtual team leadership.

5. ANALYSIS AND DISCUSSION

This section examines the social construction of leadership in virtual teams. 8 interviews were conducted to understand the nature of relationships within virtual teams. The section starts with a brief description of the company, followed by a discussion of the aspects that contribute to effective teamwork in a virtual environment: communication, relationships, leadership, and flexibility.

5.1 The Company

I-Nexus is a Coventry-based company providing strategic execution, operational excellence, and business transformation software (I-Nexus, 2016a). The company was founded in 2001. It has worked mainly with companies from the USA and Europe, such as Generali (Insurance), Pfizer, and Novartis (Pharmaceuticals) (I-Nexus, 2016b). I-Nexus delivers tailor-made software programmes to its clients. In this context, the company can be thought of as a consulting company, with a need to focus on understanding the strengths and needs of its clients.

The company has around 50 employees (Glassdoor.co.uk, 2016a), working in several departments such as software development, customer relations and human resources. According to Glassdoor.co.uk reviews (2016b), the company has quite an informal and friendly atmosphere, and users are happy to recommend its services to others. The leadership is also praised by one former employee as being open to constructive feedback (Glassdoor.co.uk, 2016b).

As stated above, the company develops and delivers software solutions. The nature of the software industry facilitates the formation of virtual teams within the company. Within the main project team, sub-teams tend to form, such as the software development team (scrum team) and the team responsible for maintaining relationships with clients. The average size of a software development team at I-Nexus is 6 people. In this study, 8 interviews were conducted, focusing on members of these teams.

5.2 Different Aspects of Virtual Teams

5.2.1 Communication

Good communication is vital to any team, including those in a virtual environment. Team members need to communicate effectively in order to deliver a good quality product. Interviewees were asked about effective communication within their teams; specifically, the frequency and quality of communications. One issue raised by interviewees is that it takes more time to establish effective communication virtually than in face-to-face teams; it is especially important in a virtual context that emphasis is placed on good communication. Factors that can have a negative impact on a team's ability to communicate include technical problems, linguistic differences and virtuality.

At I-Nexus, the most-used tool to aid communication is Google Hangouts software, which allows team members to hold video conferences and send instant messages. Other popular tools include e-mails, phone calls and Skype (online communication programme). Online shared documents are also used, allowing multiple team members to edit, organise or add information to the document simultaneously. Video conferences are preferred when there is a serious issue to discuss, but most of the time instant messages and e-mails are used to communicate.

Interviewees agreed that effective communication within a virtual team can be difficult to achieve. However, once it is obtained it seems the quality is almost the same as the face-face communication. As one of the team members stated:

“Initially, they [the communication channels] are not effective. Initially they were like disconnect. Because they weren’t trained correctly, and it took about a year to get the team and doing things right. After that, they seem to work very effectively apart from disadvantages.”

This quote highlights the way technical difficulties can undermine a virtual team’s communication. Though the team eventually adapted to the virtual environment, initially members found the various tools to be confusing.

Language barriers can also be an obstacle for effective communication. If two people do not share a common language, it can often be difficult for the two to communicate effectively. Both native and non-native English speakers mentioned the impact of language on effective communication:

“But it is not the same, it is not optimum. Also depends on the team members, people sometimes not good at with the language. Native speakers sometimes speak fast. They sometimes use colloquial language. It can be tiresome.”

The many tools which facilitate team-working in a virtual environment have made it possible to work with people all around the world. However, the lack of body language and facial expressions within a virtual environment result in less effective communication, at least in early stages. Most of the interviewees complained about not being able to see or pick up on facial expressions in a virtual conversation:

“Communication is not just hearing the voice but understanding who we are as a person. You are still missing that... That’s the thing I mean. If I were speaking virtually right now, I would have no idea what your reactions are because you are not saying anything. Right?”

As a result, communication in this interviewee’s particular virtual team is based mostly on virtual media such as Google Hangouts, which is created especially for team communication. Phone calls are not preferred, due to the loss of observable body

language. Technical difficulties, language barriers within the team, and the nature of virtuality itself all obstruct effective communication. However, as team members establish relationships with one another, virtual communication becomes as effective as face-to-face communication.

5.2.2 Relationships

Good relationships contribute greatly to the effectiveness of a virtual team. Relationships can influence the establishment of leadership. As face-to-face interactions are missing from virtual relationships, it may be expected that these relationships may differ from those of traditional teams. The argument might be made that relationships in virtual teams are more formal because interactions are often more task-oriented with fewer opportunities for informal discussion. On the other hand, it could also be claimed that virtuality makes it easier to establish informal relationships through instant and frequent communication.

Interviewees tended to emphasise the importance of informal relationships. Many stated that the atmosphere within their team is quite informal. Only two participants reported a formal working environment and relationships. This is consistent with the constructionist approach which claims reality is constructed by individuals (Grint, 2005). In this study, relationships were examined in terms of their level of formality, and participants were asked about the role of social media in their relationships.

Formal relationships seem to be important for some team members. Asked, “How do you see the importance of relationships in virtual teams?” one interviewee responded:

“If you haven’t come with a definition “this is the way things need to be done” the small window of opportunity goes away. So, it doesn’t mean somebody listens what you are saying. If you have good relationships, they listen to you and respect what you said to them. I think it’s ok. If that relationship isn’t good, you are sort of disconnected. They can come next day with doing wrong thing.”

This quote reflects the importance of formal relationships for this team member. “Respect” can be interpreted as a degree of formality within the virtual team. According to this participant, formal relationships contribute to the effectiveness of both virtual and non-virtual teams.

Interviewees were also asked about the role of informal relationships within a team. Most of the participants were in favour of informal relationships. However, the rationale behind this differed between interviewees. Some stated that informal relationships are important for effective workflow, but others highlighted the value of socialisation.

“If you have good relationships, it is easy to ask for questions. Because people are shy to ask for help. And it is good for communication.”

This participant interpreted the informal relationships as a way to increase effectiveness in the virtual team she is a part of. On the other hand, another participant sees informal relationships as an opportunity for socialising:

“So, for example one of the people based in Coventry has interest in music and creating, designing music online. And we had team members in Bulgaria who subscribed it. We can say people have different interests and they would spend time in daily meetings catching up on what is going on people’s lives outside of the work. I think it contributed the team if people know each other well.”

The role of social networks was investigated as well. Increasing use of social media may help to establish virtual relationships and friendships. Participants were asked whether they use social network websites such as Facebook and Twitter, and if they add or follow other members in their virtual team. Some of the participants do not use those websites, or only rarely use them. On the other hand, active social media users stated that they tend to establish relationships on social media with other virtual team members after they interact with them face-to-face:

“On the Facebook do I have colleagues? Yes, I do. All of my colleagues? No. It is like any environment you (are) working. There are going to be people you get on more with. I select few people for my Facebook because I believe some (of) them are my friends as well. But they are all in different levels I mean they are not the same with my childhood friends or high school friends.”

Another participant said:

“I have some friends in LinkedIn but not Facebook. It is important how long you know each other. I am here for just 9 months. It takes time.”

For these interviewees, an initial relationship is established in person, and later allowed to develop into a closer friendship with the help of social media. It should be noted that active social media users were generally younger, and that the age of the user may influence their willingness to participate in a “virtual friendship”.

As a result, relationships within a virtual team can be classified as both formal and informal. The perception of relationships may vary between team members. Some team members prefer to develop close relationships with colleagues, for social reasons or to improve performance at work. Interestingly, virtual team members seem to get to know each other face-to-face before interacting virtually via social media. This may indicate a need to trust within virtual teams.

5.2.3 Leadership

As stated before, leadership can be studied as a social construction. Relationships within a team may influence the style leadership under which that team operates. Both sides (leader and follower) define the relationship. As Uhl-Bien and Carsten (2007) assert, power can be seen as a choice; people can give it to others or withhold it. These choices might be expected to impact on leadership differently in virtual teams, because the relationships between members are inherently different.

Participants were asked about the leadership structure within their teams. Answers differed between interviewees. This is consistent with the social constructionist approach, which claims that reality is constructed by individuals, and it may change over time (Grint, 2005). In this study, it is observed that each team member perceives the leadership structure within their team in a different way. These different perceived structures can be classified as 'leaderless', 'hierarchical', and 'informal'. When discussing the characteristics of a good leader, interviewees mentioned a leader's experience, and their willingness to share responsibility. In this section these different perspectives will be explained and discussed using the interviewees' own words.

A participant stated that there is *no leadership* in her team. Instead, members are expected to be responsible for their own work. It is unclear whether this is truly the status quo within her team, or if this is simply her perception; the freedom to work relatively autonomously may allow the interviewee to believe she works within a leaderless team. This perception could be more easily maintained when there is a level of informality to communications:

"We don't have team leader. We are self-sufficient team. We have scrum master which facilitates the communication, arranges the meetings. (...) As a team, we are supposed to be equal. We have specific meeting when a work is coming for the future. We all understand what the problem is and what is wanted, how to approach it. We have another meeting before attacking work. We list the tasks and leave it to the individuals which task on the board they want to pick up. People should be self-responsible They pick up the task which is suitable for them."

According to the interviewee, to be a "leader" is to be responsible for the allocation of tasks to team members. If that duty is not assigned to an individual, the team is perceived to be leaderless.

Another perceived structure is that of a *hierarchical team*. Some participants reported that their team has a pre-defined leader and that he is responsible for allocating tasks to other members. According to these interviewees, relationships with the team leader are more formal and distant than between other group members. Asked how their team's leadership was structured, one participant responded:

“It (the leader) is X. Yes, it is pre-found. We have developer team and X is the leader. (...) Leader should be experienced. Knowledge makes a person good leader. (...) A good member could be a person who follows leader’s ideas... Not only leader’s ideas but own ideas as well. A good member pick tasks, more important tasks and productive.”

Another participant stated:

“I think relationship with leader and members are different. It is definitely more formal with leader than your colleagues. However, again it is not too formal or too informal somewhere in the middle of them. It is important to communicate with leader to ask something you don’t understand.”

Here, “leadership” is perceived as the provision of guidance to a group member, from someone who that member considers to be “the leader”. It should be noted that in both answers participants emphasised the importance of knowledge, which relates to experience. It is worth noting that these participants are both relatively young and less experienced than other participants.

Most participants reported that their team practised an *informal leadership* approach, in which the leader of the team is not perceived to be strict or an authoritarian. Team members retain a level of autonomy, and the relationships within the team are more informal, allowing members to take the initiative to act as a leader from time to time:

“(...) Other people offer different ways of contributing. Nobody is actually saying “You are going to be leader””

Another team member said:

“The scrum master has a clear role in terms of managing the teamwork load. And making sure the team is working well. The team is managed more informal when I compare to XYZ (the previous company). There were project managers who assess your performance and who you are responsible to. The scrum masters here would do that much informal way. X is my scrum master and rather than saying “This is the work and I want it until to this time”; he would say to the team “This is the thing we need to do””.

These statements suggest that virtuality enables informal relationships, which in turn encourage a more informal leadership style, whereby the leader works as a facilitator rather than a ruler.

Most of the participants emphasised the importance of *shared responsibility*. Rather than the leader alone being responsible for the process and work, team members share the responsibility:

“(...) The team together come up with list of the things that we are going to do. And member of the teams will select which tasks to pick up. And team as a whole responsible for they met, deliver their goal. The whole leadership is much more informal here.”

With an informal structure, team members are able to identify and focus on those tasks best suited to their individual skill sets. As responsibility is shared within the group, each member is equally invested in the work. This allows them to develop more equal relationships within the group, rather than leader-follower relations.

Experience can be seen as an important component of leadership. Most participants stated that a team’s leader should be an expert. This allows team members to ask for help or guidance. As stated above, power is given to the leader by the members (Uhl-Bien and Carsten, 2007). It seems that experience is crucial when assigning a leadership role within a virtual team if the leader is to gain the team’s trust.

“So, what happens if a new project come in, the application... As senior software architect as I am most likely providing leadership. But there might be somebody who has particular focus on that area. So, they might provide leadership. Because they have more experience, they might be leaders.”

This quote demonstrates the importance of experience. Even if the role of “leader” has been assigned to someone, a sufficiently experienced team member may take over the leadership role. For another interviewee, the leader’s own knowledge and experience, and the quality of the relationships they hold with team members, will dictate whether the title of “leader” is perceived to be legitimate:

“I think you should have faith on them someone with the leader title. The way of speech, and maybe background knowledge and how close we are making me believe in them. I know this person and I say this guy can do what he wants.”

Within a team, individuals may hold varying perspectives on what it means to be a “leader”. The quality of relationships within a team may create different perceived leadership structures; “leaderless”, “hierarchical” and “informal”. It may seem contradictory to have such contrasting views held by individuals within the same team. However, the concept of “leadership” is socially constructed. It is to be expected that such a concept will be perceived differently by individuals with different backgrounds. It should also be noted that shared responsibility and experience may have an impact on constructing those relations, influencing others or to be influenced.

5.2.4 Rules, Norms and Flexibility

Rules and norms can contribute to the maintenance of a hierarchy within organizations. Rationalisation and bureaucracy are mainly based on written rules in organisations (Weber, 1958). In this study, interviewees stated that there are no written rules in their virtual teams. Daily meetings in the morning are generally the norm. Participants were also asked about flexibility in their job. All of them reported that the job was flexible. Most of them stated that the flexible job was beneficial for both their motivation and effectiveness. Some interviewees mentioned a feeling of isolation. Self-discipline was also reported as an important skill when working remotely. In this section through reference to conducted interviews I discuss; first the rules and norms of a virtual team environment, and secondly prevalent attitudes toward work flexibility.

As has been previously mentioned, there are no *written rules* within the interviewees' respective teams. This may be the result of the informal and casual relationships commonly described by interviewees. Potential problems and issues are solved with reference to past experiences. Daily meetings are considered to be typical for one team. This norm was established when the team was working with an offshore team in Bulgaria. Daily meetings seem to allow team members to share their knowledge and keep one another up to date on their recent progress. This enhances collaboration and supports the feeling of shared responsibility at the same time.

"We have daily meetings every day regardless of whether everyone in the office. I was... it was for when we work with a team from Bulgaria."

Flexibility is a pre-established practice in the company. The nature of the virtual team allows team members to work remotely. This leads work to be more flexible. All participants stated that flexibility increased their efficiency:

"For me it's brilliant. I have been in I-Nexus many many years and it is the one of the reasons because they offer that flexibility. I have a family and the kids are quite young. Sometimes kids are ill and I call and say "Look, I work from home today; my son or daughter is ill." That's ok. I can do my work from home. That kind of flexibility is good. It can be difficult working at 8:30 in the office but it's not a big deal at home. That's good as well. "

It is also reported that flexibility requires *self-discipline*. Most participants said that without self-discipline, flexible work could cause delays and inefficiencies:

"It's flexible enough. However, from personal point of view I feel for working in virtual teams you have to discipline yourself. Your office hours don't start at 8 or 9 and finishes at 5. The finishing part doesn't work at home, sometimes you work after time as well."

Another participant added about flexibility:

“If you are unexperienced, better to be here. You can answer questions easily. If you are experienced and know what you are doing, I don’t see any problem.”

It can be claimed that self-discipline and experience are related and needed for effectiveness in flexible virtual teams.

A sense of *isolation* was often identified as one disadvantage of flexibility in the workplace (Golden et al., 2008). Some participants stated that they felt isolated if they were away from the office for an extended period of time:

“I work from home 3 days in row. Then I feel a bit isolated from the rest of team. So, I don’t like long periods. A couple of days I think is effective. I provide leadership and it’s more effective to be here and be able to sort of jump between people. Answering the questions is easy here.”

Another participant complained about losing social skills if the period was too long:

“In the past when I was working XYZ, I was working from home pretty much. For 2 years I worked from home probably 90% of time. Over that time, I realised later that my social skills deteriorated by not seeing people face-to-face. I wouldn’t work from home for extended period of time without coming to office regularly. I come to office a couple of days in a week.”

It seems that flexibility is effective until a certain point. After that, team members may feel isolated or may worry about being unsociable.

To conclude if there are sufficiently strong relationships within a team, written rules may not be necessary. When an issue arises, a ‘norm’ or unwritten rule may develop in response, and this will continue to be followed if it proves effective. Interviewees were generally in favour of flexibility. However, if the time spent out of the office increases, they may start feeling isolated.

6. CONCLUSION

This study aimed to explore the impact of interpersonal relationships on the establishment of leadership roles within virtual teams. The importance of flexibility and communication to team dynamics were also investigated. To understand these aspects better, Mary Uhl-Bien’s (2006) Relational Leadership Theory was used as a framework. A British strategic execution and software company was contacted, and several interviews were conducted to collect data. The social constructionist approach was used to evaluate data. It was observed that team members’ perception of “leadership” depends upon their personal familiarity with the leader, and with the leader’s past experience. “Leadership”

is perceived and described by team members in different ways; where one team member discusses a *leaderless* framework, another may emphasise an *informal* leadership framework. This can be interpreted as a result of different relational dynamics.

It must be noted that in the early stages of a developing team, quality of communication plays an essential role. However, once the relationships are established and technical problems are resolved, interpersonal relationships will develop similarly in virtual and non-virtual teams. A lack of written rules may follow from the informal communication style and workplace flexibility typically afforded by this environment.

This study aimed to explore the social construction of leadership in virtual teams. The findings of present research show that relationships have a crucial impact on the establishment of a leader. However, further investigation is required. The study was limited by time and word count. Another limitation relates to the social constructionist approach. In any study, there is the risk of subjectivity (Bryman and Bell, 2007). The study was also limited by the number of interviews conducted. Accumulation of further data would help to elucidate the connections between teamwork, leadership, and interpersonal relationships. It can be suggested that the qualitative approach is useful to detect social construction of leadership in virtual teams. However, more research is needed to examine leadership and effectiveness of virtual teams. This can be achieved through application of more quantitative approaches. For instance, measuring output of each team in numerical terms may provide a better understanding of the subject researched.

This study did not intend to form universally applicable conclusions. However, some of these findings may be relevant to other companies. First, that initial face-to-face interactions facilitate the development of relationships, leading to increased efficiency of communication between team members. Secondly, that working remotely increases effectiveness up to a certain point. Companies should be aware of the risk of employees' feeling isolated. Lastly, facilitating and enhancing informal relationships can increase collaboration and efficiency within a virtual team. Moreover, there can be some practical applications of present research. First, virtual team leaders may use regular formal or informal meetings to increase the level of communication within the virtual teams. This can be achieved through online meetings. Secondly, virtual team leaders may seek elimination of the feeling of isolation through hybrid working model. Using online and face-to-face communication channels can improve the sense of community and eliminate the feeling of isolation. Last, virtual team leaders may encourage informal relationships by facilitating a suitable environment for the team members. For instance, a virtual team leader may ask a successful team member to share his or her experience with other team members.

In conclusion, there are still many aspects of relationships within virtual teams to be explored. For example, relationships can be studied in the context of cultural or

generational differences between team members. Another approach may investigate leadership in virtual teams in more quantitative approach which can demonstrate the role of relations in virtual teams more directly and measurable. Future research will increase understanding of virtual teams, relationships and leadership. As one participant said: “It is all about bringing parts of a picture together.”

COMPLIANCE WITH ETHICAL STANDARD

Conflict of Interests: There is no conflict of interest between the authors or any third-party individuals or institutions.

Ethics Committee Approval: This research has been conducted as a master’s dissertation at the University of Warwick and meet the ethical standards of the University of Warwick.

Funding Disclosure: This research has been conducted as a part of the author’s master’s dissertation in the University of Warwick. The study is sponsored by Ministry of National Education of Türkiye under YLSY scholarship programme.

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