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VIRTUAL SOCIAL ONBOARDING: BRIDGING THE GAP BETWEEN NEWCOMER ADJUSTMENT AND WORKPLACE FRIENDSHIPS IN VIRTUAL WORK TEAMS

ERTEMISA P. GODINEZ

85 Pages

Many organizations are choosing to adopt some form of remote work teams, including local-but-dispersed teams, long-term post-COVID 19. These organizations are now tasked with addressing challenges around remote work such as newcomer engagement and newcomer onboarding (MacKenzie et al., 2022). This study explores how virtual onboarding impacts newcomer adjustment and the development of workplace friendships in fully remote teams due to the correlation with the desired outcomes of onboarding and socialization (Allen, 2006; Feeley et al., 2008; Hemphill & Begel, 2011; Jones, 1986; Korte & Lin, 2013; Mignerey et al., 1995; Morrison, 2004; Sias & Cahill, 1998). Organizational socialization tactics (Jones, 1986; Van Maanen & Schein, 1977) and media richness theory (Daft et al., 1987; Daft & Lengel, 1986) were used as frameworks to explore which existing virtual onboarding strategies are most influential in facilitating newcomer adjustment and workplace friendships. An analysis of the mixed-methods online survey found institutionalized socialization tactics were significantly related to positive newcomer adjustment and workplace friendships. However, contrary to previous literature, the social aspects socialization tactics were not the most influential in virtual onboarding for facilitating newcomer adjustment and workplace friendships. The results considering media richness in virtual onboarding on newcomer adjustment was not conclusive, and media richness was not significantly related to workplace friendships. And lastly, a thematic analysis of responses provided insight into which virtual onboarding strategies implemented by

organizations were most effective for promoting newcomer adjustment and workplace friendships.

KEYWORDS: Organizational socialization; socialization tactics; newcomer adjustment; workplace friendship; media richness theory; social information processing theory; media multiplexity theory

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ERTEMISA P. GODINEZ

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE

School of Communication

ILLINOIS STATE UNIVERSITY

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CHAPTER I: INTRODUCTION

While remote or virtual work teams were not a new concept before the COVID-19 pandemic, it did ignite a sudden increase in virtual work teams that has persisted. A unique characteristic of virtual work teams post-COVID 19 is the increase in local-but-dispersed work teams, where organization members may live in relative proximity but work from home. As communities and organizations move away from strict work-from-home requirements, many organizations are choosing to adopt remote work teams long-term. Nearly two-thirds of human resource professionals cited going fully remote as a response to COVID-19 and 41.3% of respondents said they will likely move some positions to a permanent virtual environment; and an additional 9% said they will be fully remote after COVID (MacKenzie et al., 2022.). This means many organizations that did not previously have virtual teams are now needing to adjust their communication, recruitment, and onboarding as they continue to hire and grow their virtual workforce (MacKenzie et al., 2022; Sibisi & Kappers, 2022; Stevenson, 2021; Stuchlik & Wood, 2021a). Organizations should reflect on how they can build virtual work teams that are sustainable, successful, and satisfying for their employees, especially when organizations foresee challenges around remote work such as newcomer engagement (51.7%) and newcomer onboarding (49.7%; MacKenzie et al., 2022).

Although there are many benefits to virtual work teams, the COVID-19 crisis also brought to the forefront the effects of social isolation associated with work-from-home requirements. While work-from-home arrangements can enable work-life balance, they can also negatively impact employees' socioemotional health (Scott et al., 2022). The lack of social connection that can occur from working remotely can lead to fewer meaningful workplace relationships, diminished work satisfaction, and increased turnover (Feeley et al., 2008).

Therefore, organizations need to find effective ways to build social connections through their virtual onboarding programs for fully remote teams. Virtual onboarding strategies should go beyond skills training and strive to also mitigate the biggest concern surrounding remote teams: reduced opportunities for newcomers to develop meaningful work relationships that are needed to boost retention, work satisfaction, and job performance when working fully remote. Thus, this research will explore how organizations successfully onboard new hires into fully virtual work teams in such ways that lead to successful newcomer adjustment and facilitate meaningful workplace relationships.

CHAPTER II: LITERATURE REVIEW

This study will explore the communication and strategies by which virtual onboarding is organized and carried out to prepare a new hire for a fully remote team. While some of the topics discussed here may also apply to onboarding more broadly, the challenges faced in fully computer-mediated onboarding demand deliberate attention. Therefore, this review of literature will begin by describing onboarding as it has evolved into the virtual landscape, then continue by delving into how onboarding is a product of socialization efforts necessary for newcomer adjustment. After reviewing how socialization efforts need to be more deliberate in a virtual environment, I will explore how meaningful workplace relationships are especially crucial for socialization for fully remote teams and conclude by describing the modern virtual workforce and how communication is unique to this environment.

Challenges of Virtual Onboarding

To understand the challenges unique to virtual onboarding, it is important to review the goal of onboarding as a whole. The term "onboarding" originated in the 1990s. Originally, it referred to a training process for upper management and executives to prepare them for their new roles, while subordinates only received an employee orientation (Bell, 2021). Eventually, onboarding transformed to be a process to acclimate all employees into a new role or organization. Prior to the 1990s, onboarding was researched as organizational socialization by scholars to examine the different factors impacting a person's transition into a new role or company. (Bell, 2021; Jones, 1986; Van Maanen & Schein, 1977).

As opposed to employee orientation, onboarding is not a singular event, but an entire process by which the organization ensures the newcomer has the information and connections needed to adjust to their role in as little time as possible (Sibisi & Kappers, 2022; Silberman,

2015). Employee orientation, which is one component of onboarding, is a one-time event to introduce the new employee to the organization and its members (Sheetz, 2020; Lewkovich, 2017). While an effective onboarding program includes a detailed employee orientation, onboarding encompasses much more (Allen, 2020; Roth et al., 2014). Onboarding is how an organization aligns, acquires, accommodates, assimilates, and accelerates new team members into their new roles or team to help newcomers meet their employer's expectations, regardless of if they come from outside or inside the organization (Bradt & Vonnegut, 2009). Aligning refers to the organization agreeing on the newcomers' needs and responsibilities. Acquiring refers to identifying, recruiting, and selecting people to join the team. Accommodating is giving the newcomer the tools they need to work. Assimilation focuses on helping the newcomers join with the existing members for cohesion and being able to work together. And lastly, acceleration refers to helping the newcomer and their team achieve their goals better and faster (Bradt & Vonnegut, 2009). While the alignment, acquisition, and accommodation occur before the first day in preparation for the newcomer's arrival, the first day starts the assimilation process and should be focused on enabling the newcomer to build the relationships they need to be successful in their role (Bradt & Vonnegut, 2009). The first day at a new organization is commonly focused on introducing the newcomer to the work environment and company culture, to show the new employee how the organization functions and "instill a sense of pride in their new affiliation" (Cable et al., 2013, p. 23).

An effective onboarding program is crucial for any organization. Employees who experience a well-structured onboarding program are 69% more likely to remain with that organization (Scott et al., 2022). Yet, despite the important role onboarding has for both the organization and the new employee, it is not always done effectively. Only 12% of U.S.

employees describe their company as having done a good job with onboarding, often due to onboarding either providing newcomers with too much or too little information and not fostering a sense of belonging in the organization (Sundaram & Patel, 2019; Wetherell & Nelson, 2021). While skills training is a necessary component of onboarding, only 29% of new hires describe feeling fully prepared and supported to succeed in their role after their onboarding experience (Wetherell & Nelson, 2021). Meaning many newcomers then must seek out additional information from their peers and managers to reduce uncertainty and attain the required information (Morrison, 1993). An effective onboarding experience should set the newcomer up with access to information, resources, and the people needed to obtain more information to perform their role effectively and reduce uncertainty (Petrilli et al., 2022; Snell, 2006).

An exceptional onboarding program provides information, tools, and experiences beyond technical training. Onboarding should not only prepare the newcomer for their role and responsibilities but also establish the employee with a sense of belonging and connection (Wetherell & Nelson, 2021). Onboarding programs need to establish lasting relationships between new employees and the organization, including their team members, outside departments, and leadership (Sibisi & Kappers, 2022; Snell, 2006). Relationships allow new employees to feel supported, respected, and a means to valuable information (Bridge & Baxter, 1992; Wetherell & Nelson, 2021). Therefore, onboarding that is centered around social ties and learning from coworkers is more likely to succeed. This should motivate organizations to find creative ways to build genuine connections that go beyond formal work communication (Scott et al., 2022; Wetherell & Nelson, 2021).

While these challenges are true for any form of onboarding, regardless of being in-person or virtual, there are additional challenges unique to computer-mediated onboarding. Virtual or

online onboarding refers to an organization using online technology to integrate employees into remote teams while members are physically distanced. The physical isolation from the organization and its members can make employee engagement and team building challenging (Pauleen, 2003; Pauleen & Young, 2001b; MacKenzie et al., 2022). In virtual onboarding, physical isolation means that communication must be deliberate since newcomers are unable to interact with other people by happenstance as you might in a physical office (Hemphill & Begel, 2011; Stuchlik & Wood, 2021b). Additionally, newcomers to fully remote teams rely more heavily on online tools and resources, such as online training documents and documentation about processes (Hemphill & Begel, 2011). Consequently, physical distance, deliberate communication interactions, and increased online resources distinguish virtual onboarding from traditional in-person onboarding. Hence, virtual onboarding should focus extensively on fostering social connection by both providing structure and connecting people, in addition to building knowledge, to account for these differences (Scott et al., 2022). Virtual onboarding is tasked with strategically preparing newcomers for job responsibilities while also combating the challenges of being physically distanced from the organization.

Onboarding as Organizational Socialization and Newcomer Adjustment

The desired result of onboarding is for the newcomer to adjust to their role and integrate into the organization. Van Maanen and Schein (1977) define organizational socialization as the process of members learning the values, norms, and behaviors required to appropriately participate in the organization, and is comprised of *anticipatory socialization, organizational encounter, metamorphosis,* and *organizational exit* (Jablin, 1987). Although the newcomer is undergoing socialization throughout their time within the organization, onboarding acts as a mechanism to facilitate newcomers' assimilation into an organization's culture early in the

socialization process (Cable et al., 2013; Saks et al., 2007; Scott et al., 2022), and occurs primarily during the anticipatory socialization phase and the organizational encounter.

In the anticipatory socialization stage, potential new employees consider what it would be like to be a member of this organization and how they would be in this new role (Cebollero, 2019; Jablin, 1987). In this phase, the organization has the employee excited to join the organization and the organization can assess how the applicant aligns with the organization's values and needs. Anticipatory socialization efforts, such as experiences with the organization's products or services, researching the organization's social media presence, or reviewing the organization's website can significantly influence organization identification (Stephens & Dailey, 2012). While there is still a lack of research into how or if virtual onboarding has changed strategies of anticipatory socialization for individuals going into fully remote work teams, organizations should continue to provide as much information online as possible that can illustrate to applicants what their work-life would look like there.

The organizational entry represents the critical time when employees learn their roles and the ropes of the organization, which can affect their relationships with members of their team and their success in their role (Miller & Jablin, 1991). Newcomers' primary focus is to adjust to their new roles, master their tasks, and adjust to the social group. Newcomer adjustment is thus characterized by role clarity, self-efficacy, and social acceptance (Bauer et al., 2007). Bauer et al. (2007) presented a model of newcomer adjustment that treats *organizational socialization tactics* and *information seeking* as antecedents of newcomer adjustment. Positive job performance, job satisfaction, organizational commitment, intention to remain, and decreased turnover are then the outcomes of successful newcomer adjustment (Bauer et al., 2007). Onboarding is related to both the antecedents of this process: organizational socialization tactics

and information seeking. Socialization tactics are the ways organizations help newcomers adapt during their initial entry, reduce uncertainty, increase desired attitudes, and instill knowledge required for their new role (Allen, 2006; Bauer et al, 2007; Burke et al., 2010; Saks et al., 2007; Van Maanen & Schein, 1977). Onboarding acts as a socialization tactic and can also help facilitate the newcomer's future information seeking behavior.

Socialization Tactics & Onboarding

Organizational socialization tactics refer to the ways organizations structure the transitional experience and present information to newcomers to ease the adjustment to new roles (Bauer et al., 2007; Van Maanen & Schein, 1977). Organizations use a wide variety of socialization tactics to help newcomers adapt to this new environment during the encounter phase (Allen, 2006). Van Maanen and Schein (1977) present six sets of organizational socialization tactics, which are distinguished by events that will likely influence newcomers to take either a custodial or an innovative response to their role. A custodial response refers to the newcomer accepting the status quo regarding the knowledge, strategies, and goals associated with their role. In contrast, an innovative response refers to newcomers either rejecting or redefining the assumptions associated with the goals and strategies that define the role or how to perform it (Van Maanen & Schein, 1977). Therefore, each set represents the polar responses to strategies the organization can enact. These six tactics include collective vs. individual socialization processes, formal vs. informal socialization processes, sequential vs. random socialization processes, fixed vs variable socialization processes, serial vs. disjunctive socialization processes, and investiture vs. divestiture socialization processes. Jones (1986) later grouped the tactics that will produce custodial responses as institutionalized socialization tactics, and those that produce innovative responses as individualized socialization tactics. In addition,

the tactics were further distinguished into three classifications based on their main area of focus: context, content, and social aspects (Jones, 1986; Table 1).

Context Socialization Tactics. Context socialization tactics – including collective/individual tactics and formal/informal tactics – refer to the contexts in which organizations choose to provide information to the newcomer (Jones, 1986; Van Maanen & Schein, 1977). Collective tactics have newcomers go through learning experiences that are designed to produce a standardized set of responses to certain situations, which encourages the newcomer to not question the status quo of the knowledge, strategies, and missions associated with their role. However, individual socialization tactics give each newcomer a unique set of learning experiences that allow them to have varied, personalized, and innovative responses (Jones, 1986). Formal vs. informal tactics also refer to the context in which information is presented. Formal tactics involve newcomers being separated from other organization members while they learn their responsibilities (Van Maanen & Schein, 1977). This increases the

Table 1

	INSTITUTIONALIZED TACTICS	INDIVIDUALIZED TACTICS
CONTEXT	Collective	Individual
	Formal	Informal
CONTENT	Sequential	Random
	Fixed	Variable
SOCIAL	Serial	Disjunctive
	Investiture	Divestiture

Jones' (1986) Classification of Socialization Tactics

probability of the newcomer accepting the information more rigidly and adhering to the group norms, especially when coupled with collective tactics (Jones, 1986). By contrast, informal tactics keep the newcomer a part of the workgroups while the learning takes place.

Content Socialization Tactics. Content tactics – including sequential/random tactics and fixed/variable tactics – deal with the information newcomers are given (Jones, 1986). Sequential tactics involve explicit information about the sequence of steps the newcomer will go through in the organization, while in random tactics the newcomer does not know the sequence. Fixed tactics offer precise knowledge about the timeline expected in completing each stage. In contrast, variable tactics do not provide information about when the newcomer could reach a certain stage in the learning process (Van Maanen & Schein, 1977). Due to the lack of information provided in random and variable tactics, newcomers will feel uncertain about the organization or role, which can lead to increased anxiety, conformity, or even innovative responses to cope (Jones, 1986).

Social Socialization Tactics. Social tactics – including serial/disjunctive tactics and investiture/divestiture tactics – demonstrate the interpersonal nature of the socialization process where other organization members interact with the newcomers (Jones, 1986). Serial tactics involve experienced organizational members acting as role models for the newcomer, while disjunctive tactics do not provide a role model to inform the newcomer on how to proceed in the new role. Investiture vs. divestiture refers to the positive or negative support the newcomer received from the existing organizational members. An investiture tactic communicates to the newcomer that the organization does not want the newcomer to change, but instead builds up the skills and values they already possess. In contrast, the divestiture tactic attempts to strip the

personal characteristics of the newcomer to explicitly mold them into what the organization wishes (Van Maanen & Schein, 1977).

Institutionalized socialization tactics (collective, formal, sequential, fixed, serial, and investiture) have been linked to enhancing newcomer loyalty and reducing turnover as they provide newcomers with information that reduces uncertainty and offers a structured and formalized socialization process, compared to their individualized socialization tactic counterparts (individual, informal, random, variable, disjunctive, divestiture tactics) (Allen, 2006; Jones, 1986; Saks et al., 2007). Additionally, between content, context, and social tactics described by Jones (1986), social tactics were demonstrated to be the most influential for newcomers to adjust to their organization as they actively embed the newcomer into the organization and offer social cues needed for learning (Allen, 2006; Jones, 1986; Saks et al., 2007). Social relationships are a dominant dimension in the socialization process, by which the quality of the relationships that are formed between newcomers and their coworkers and managers largely impacts how well they fit into the social structure of the workgroup (Korte & Lin, 2013). Therefore, organizations should prioritize their responsibilities for properly integrating the newcomer into social structures. To integrate a new employee into a virtual team, the organization should structure its onboarding practice to include institutionalized socialization tactics and place special emphasis on the social dimension to help new employees have relationships they can leverage.

The second antecedent to newcomer adjustment is information seeking. Although the organization provides as much information as possible through organizational socialization tactics, newcomers often still experience role ambiguity and role conflict for various reasons

(Miller & Jablin, 1991). The following section will discuss how onboarding can also be beneficial to prime newcomers to have better information seeking behaviors.

Information Seeking

Information seeking tactics are deliberate attempts on the part of the newcomer to obtain the information they need (Bauer et al., 2007; Miller & Jablin, 1991; Morrison, 1993). These tactics include overt questions, indirect questions, third-party information sources, testing limits (for example violating a procedure to see how relevant it is), disguising conversations, observing, and monitoring (Miller & Jablin, 1991). The way the newcomer seeks information is influenced by their level of uncertainty, their concept of the perceived social cost associated with the information request, and other contextual factors unique to the organizational setting (Miller & Jablin, 1991; Xu et al., 2010). Therefore, the information seeking tactic new employees choose to use will vary depending on the type of information they are seeking and whom the newcomer wants to obtain the information from.

Research by Morrison (1993) found newcomers most often engage in monitoring compared to inquiry, likely due to the innate aversion to the social costs associated with direct questions. However, newcomers more frequently used direct inquiry when seeking technical information and asking a supervisor rather than a peer, since technical information is highly valuable and difficult to obtain through monitoring. For social feedback and normative information, newcomers were more likely to ask peers compared to supervisors. Reducing uncertainty around their role and responsibilities is the main priority for newcomers, therefore being unsure of who can provide them with information or assistance when needed can be a source of anxiety and disappointment (Korte & Lin, 2013). In this regard, finding or being assigned a mentor during the organizational entry allows the newcomer to have a clear resource

to learn how to accomplish tasks, understand the organizational culture, and facilitate integration into the group (Korte & Lin, 2013). This supports the idea that social relationships are essential for both information seeking and organizational socialization.

Consistent with collocated teams, newcomers in virtual teams seek information from established members in an efficient manner (Ahuja & Carley, 1999; Ahuja & Galvin, 2003). However, contrary to collocated teams where newcomers mostly use passive means to gain information such as monitoring (Miller & Jablin, 1991; Morrison, 1993), newcomers in virtual groups take a more active approach employing direct inquiry (Ahuja & Galvin, 2003; Hemphill & Begel, 2011). Therefore, having social relationships available to feel comfortable and confident to ask direct inquiries is an important factor that organizations need to recognize. If social relationships impact information seeking behavior, organizations must prioritize not only information delivery but also facilitate social relationships for the newcomer.

The Importance of Relationships for Socialization

Organizational socialization does not occur within a vacuum, but rather is sustained and influenced by the people within the organization that surround the newcomer to facilitate successful socialization (Korte & Lin, 2013; Van Maanen & Schein, 1977). Existing organization members provide guidance and support to newcomers. During socialization, newcomers are much more reliant on their work team rather than the organization at large to develop a sense of what their role within the group would be (Korte & Lin, 2013). Therefore, extra attention should be given to intragroup communication that provides newcomers with the opportunity to identify organizational members that they can lean on to learn tasks and expectations of their role. As newcomers communicate and build relationships with coworkers

differently while working remotely, this brings up the question of how virtual teams manage to build successful and enriching relationships.

Newcomers are often set up with a mentor, which is an individual who specialized in the role and offers support or guidance to the newcomer, to help provide a relationship for guidance and resources (Caldwell & Peters, 2018; Kram & Isabella, 1985; Wetherell & Nelson, 2021), but newcomers can develop different types of relationships in their organizations beyond the mentorship set up by the onboarding process. Three types of work-peer relationships can develop: information peers, collegial peers, and special peers (Kram & Isabella, 1985), which reflect a continuum of increasing levels of trust and self-disclosure. Information peer relationships are characterized by low levels of trust and self-disclosure but provide a means for exchanging work-related information. Collegial peer relationships demonstrate a moderate level of trust and self-disclosure, and the information exchanged is broadened to include emotional support, feedback, and self-expression. Special peer relationships are the rarest and most intimate form of peer relationships and involve disclosing work and personal concerns and support (Kram & Isabella, 1985). Special peer relationships represent friendships in the workplace, which are valuable resources for newcomers and organizations, as friendships - particularly the number of friendship networks rather than the closeness of the friendship – at work are the strongest predictor against turnover (Feeley et al., 2008). This means the more friends the individual has in the workplace the less likely they are to leave. This is likely due to how friendships in the workplace offer benefits, such as access to information, work-related assistance, psychological support, and increased openness and trust within their work relationships (Bridge & Baxter, 1992).

While there is a lack of informal 'water cooler' conversations that are plentiful in collocated teams, organizations can engineer 'water cooler' moments for virtual teams to foster informal interactions (Bojinov et al., 2021; Woo et al., 2022). Organizations that are trying to grow their remote work teams should include in their virtual onboarding processes strategies that create opportunities to build meaningful relationships, with the goal of developing friendships, such as instituting regular coffee or lunch virtual chats and using collaborate software for sharing personal updates or anecdotes (Stuchlik & Wood, 2021b; Woo et al., 2022). Opportunities for friendships and the prevalence of friendships within the workplace have an impact on organizational commitment (Morrison, 2004; Nielsen et al., 2000), and virtual onboarding practices can serve to introduce newcomers to organization members and be an opportunity for relationships to develop.

Factors that promoted the development of peer friendships in the workplace include contextual factors, individual factors, and communication changes. Contextual factors include proximity, shared tasks, and extra-organizational socializing; individual factors are perceived similarities and personality affinity; and communication change refers to increased discussion of non-work and personal related topics and decreased caution (Sias & Cahill, 1998). If conversations in the workplace are only discussing work-related topics, then there is no opportunity to develop a relationship beyond the mandated workplace relationships (Sias et al., 2004). Mutual self-disclosure, shared understanding, and perceived similarity is needed to develop and deepen relationships (Pillemer & Rothbard, 2018). Given that the amount of workplace friendships impacts how newcomers seek information, find support, and feel satisfied and committed to the organization, organizations must set newcomers with the opportunities and tools to develop special peer relationships that can develop into friendships during their

onboarding process. Particularly when considering a virtual workforce, organizations should take a proactive stance on setting up opportunities to build relationships and friendships when teams are destructive and/or separated by time zones.

The Modern Virtual Workforce

Virtual teams consist of individuals who work interdependently and are committed to a common goal despite being separated by time, space, and synchronous or asynchronous communication (Scott, 2013). Most modern virtual teams use multiple channels to communicate, such as phone calls, voicemail, email, and videoconferencing. The different available media for communication can allow varying levels of mutual understanding between interactants. Media richness theory provides a framework for evaluating the effectiveness of certain media to reduce equivocality when sharing information to reduce uncertainty (Daft et al., 1987; Daft & Lengel, 1986). Equivocality refers to the way information can be ambiguous in its potential to be interpreted in several different ways; and uncertainty is the absence of answers to explicit questions (Daft & Lengel, 1986). Daft and Lengel (1986) proffered the way information is communicated can vary in richness, in that information richness is "the ability of information to change understanding within a time interval" (p. 560). Communication media can vary in their ability to express information richness based on the medium's ability to exchange feedback, the number of cues being used, personalization, and language variety (Daft et al., 1987). Therefore, face-to-face communication is considered the richest medium, followed by telephone communication, addressed written documents, formal or impersonal documents, and lastly, numeric documents are the leanest media (Daft & Lengel, 1986; Daft et al., 1987). A communicator's goal should be to choose a medium whose richness matches the equivocality reduction needed for users to overcome different perspectives and process complex messages.

Likewise in situations where the content is clear, unambiguous, and there are similar frames of reference, a communicator may choose a leaner media (Daft et al., 1987). Media richness theory can be beneficial for evaluating the richness of new media being used in virtual teams and how effective the media choice is for sharing information between remote members.

Virtual onboarding must select communication channels strategically based on the targeted outcomes. While email may be better for communicating information and coordinating tasks, it is not as effective for relationship building as instant messaging, telephone calls, or videoconferencing (Pauleen & Young, 2001a; Pauleen & Young, 2001b). Face-to-face meetings and rich electronic communication are important in socializing remote teams to establish shared norms, attitudes, and behaviors as it allows clearer social and nonverbal cues compared to asynchronous communication channels (Ahuja & Galvin, 2003; Cramton, 2002; Crowston et al., 2007; Oshri et al., 2007; Pauleen & Young, 2001b). Videoconferencing systems can parallel inperson interactions which allow for very information-rich interactions (Daft & Lengel, 1986; Pauleen & Young, 2001a), meaning onboarding programs should strategically utilize videoconferencing to reduce uncertainty and build relationships as an alternative to email or instant messaging (Pauleen & Young, 2001b; Townsend et al., 1998). Organizations' virtual onboarding and socialization should consider media richness in their onboarding processes to strategically choose which channel to communicate information, distribute tasks, and build relationships.

Hypotheses and Research Questions

Given the increase of virtual work teams in the last few years as a result of the pandemic, there is a need to evaluate the socialization tactics being employed in virtual onboarding strategies. In virtual onboarding, the physical distance and isolation from other organization

members mean communication between organization members and teammates must be intentional with their computer-mediated communication since there are no opportunities to casually bump into another person in the elevator or in the hallways. Therefore, the reliance on deliberate computer-mediated communication and remote communication could change what the onboarding process looks like and may impact the success of socialization tactics for virtual teams.

Institutionalized socialization tactics are characterized by the focus on how the newcomer can best fit within the organization, passively accept their roles, and provide newcomers with the information needed to reduce uncertainty (Jones, 1986; Sak et al., 2007). Although institutionalized socialization tactics have been shown to positively influence newcomer adjustment (Griffeth & Hom, 2001 in Allen, 2006; Jones, 1986; Saks et al., 2007), it has not yet been explored if the contextual and communication factors created by institutionalized socialization tactics could also positively influence the development of workplace friendships by promoting the notion of perceived similarities and shared understanding (Pillemer & Rothbard, 2018; Sias & Cahill, 1998). Given that these conditions provided by institutionalized tactics should not be impacted by physical distance or computer-mediated communication, one would predict institutionalized socialization tactics (i.e., formal, collective, sequential, fixed, serial, and investiture) would continue to be most beneficial for newcomer adjustment and the development of workplace friendships in virtual teams, thus leading to the first two hypotheses.

H1: The more institutionalized socialization tactics in virtual onboarding will lead to a more positive newcomer adjustment.

H2: The more institutionalized socialization tactics in virtual onboarding will facilitate the development of workplace friendships.

However, what these tactics will look like in virtual onboarding strategies has yet to be explored, thus the following research questions are proposed.

RQ1: What virtual onboarding strategies are used to facilitate positive newcomer adjustment?

RQ2: What virtual onboarding strategies are used to facilitate the development of workplace friendships?

As previously described, Jones (1986) further categorized socialization tactics into three groups: social tactics, content tactics, and context tactics. Social socialization tactics have been demonstrated to be the most influential to newcomer adjustment in traditional collocated teams, but this may be complicated by the distance and social isolation in remote teams. The interpersonal aspect of virtual onboarding is a primary concern for organizations, as casual interactions with organization members are more limited (Hart & McLeod, 2003; Hemphill & Begel, 2011; Pauleen, 2003; Woo et al., 2022). Therefore, if organizations employ social tactics (investiture and serial) in their onboarding, such tactics will foster meaningful workplace relationships and positive newcomer adjustments, leading to the following hypotheses:

H3: Of the institutionalized socialization tactics, social tactics (investiture and serial) in virtual onboarding will be the most influential to positive newcomer adjustment.H4: Of the institutionalized socialization tactics, social tactics (investiture and serial) in virtual onboarding will be the most influential to the development of workplace friendships.

Virtual teams use a variety of different channels for synchronous and asynchronous communication. Per media richness theory, rich media that reduces equivocality should allow interactants to come to a common understanding (Daft et al., 1987; Daft & Lengel, 1986). As

uncertainty reduction is necessary for newcomer adjustment (Mignerey et al., 1995), it is important to evaluate how media richness manages equivocality and uncertainty to impact newcomer adjustment. Additionally, if shared understanding, perceived similarity, and mutual self-disclosure are needed to develop and deepen friendships (Pillemer & Rothbard, 2018), then rich media should allow for better mutual understanding and help develop workplace friendships, Thus, the following hypothesis:

H5: Virtual onboarding that uses richer media will lead to positive newcomer adjustment.

H6: Virtual onboarding that uses richer media will lead to workplace friendships.

To address these hypotheses and research questions, a mixed methods survey was conducted to gather the experiences of professionals who have recently participated in a virtual onboarding process and evaluate how their onboarding experience facilitated their newcomer adjustment and workplace friendship.

CHAPTER III: METHODS

To answer the hypotheses and research questions, this study will employ a mixed-method approach. The quantitative survey will provide empirical data on the effects of socialization tactics used and media richness on newcomer adjustment and workplace friendship, while the open-ended questions provide rich qualitative data about the onboarding tactics used in a virtual environment that respondents identify as being most beneficial to their newcomer adjustment and development of workplace friendships. The following section will describe how this study was conducted and how it attempted to address each hypothesis and research question. First, there will be a description of the respondents who participated in the online survey, followed by the procedures of how the survey was created and how the open-ended questions were thematically analyzed, then finally the measures will be described for each empirical scale.

Respondents

This research sought to utilize the experiences and perceptions of professionals who had joined a virtual team—defined as a work team relying on synchronous and asynchronous computer-mediated communication (Scott, 2013)—in the last 12 months, and had undergone a virtual onboarding process. This time criteria helped ensure accurate recall of the onboarding experience while still providing enough time for relationships to develop via computer-mediated communication. Potential respondents were recruited via two methods. First, a research invitation was shared via LinkedIn and through network sampling, asking respondents to share the research invitation with colleagues who fit the research criteria (Keyton, 2011). LinkedIn was chosen as the platform for recruitment as it is one of the most popular websites for job search and recruitment (Morgan, 2021); therefore, it is likely users who would view the research invitation recently started a position that would make them eligible for this research, or they know someone

in their network who would be eligible. Second, the survey was posted on a virtual crowdsourcing marketplace, Amazon Mechanical Turk (mTurk), with a \$1 compensation for completion. Recruiting via mTurk increased the scope of respondents beyond the initial LinkedIn network and provided additional respondents and experiences.

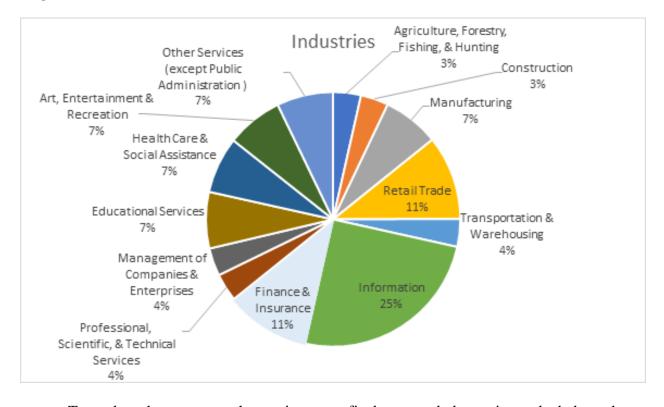
Of the 169 completed survey responses, 29 responses fell within the time criteria of 12 months since their virtual onboarding. Of this final N = 29 sample, 48.3% of respondents self-reported their gender as female and 51.7% as male. The sample ranged in age from 20 to 52 (M = 32). Of the respondents, 93.1% of individuals had their onboarding experience during 2022, and 6.9% had their onboarding during the first two months of 2023. Respondents self-identified the profession/industry they were onboarded into from a list derived from the U.S. Census Bureau (2022) North American Industry Classification System: 3.4% of respondents were from agriculture, forestry, fishing, and hunting; 3.4% from construction; 6.9% from manufacturing; 10.3% retail trade; 3.4% from transportation and warehousing; 24.1% from information; 10.3% from finance and insurance; 3.4% from professional, scientific, and technical services; 6.9% from health care and social assistance; 6.9% from art, entertainment, and recreation; 6.9% from other services (except public administration; Figure 1).

Procedures

The online survey was hosted on Qualtrics, and the link was distributed electronically with IRB approval. Respondents provided informed consent and completed a 72-item online survey regarding their virtual onboarding experience. The survey was comprised of 5 parts to assess socialization tactics, newcomer adjustment, workplace friendships, and communication channels used.

Figure 1

Respondent Industries Breakdown



To explore the two research questions, two final open-ended questions asked about the virtual onboarding strategies the respondents experienced. Thematic analysis (Braun & Clarke, 2006) was used to report and synthesize the open-ended questions regarding what strategies were beneficial in facilitating newcomer adjustment (RQ1) and workplace friendships (RQ2). Following Braun and Clarke's (2006) steps in thematic analysis, after reviewing the responses initial coding was conducted to identify segments within the answers that described how respondents adjusted to their roles and developed workplace friendships. Codes were then reviewed and collated to identify overarching patterns and themes. After repeated revisions of the initially derived themes, the final themes were crafted to address each of the two research questions.

Measures

Socialization Tactics

Socialization tactics were operationalized according to Jones' (1986) classification of institutionalized and individualized, and they were measured using Jones' (1986) 30-item socialization tactic scale ($\alpha = 0.79$). Respondents responded to items using a 7-point Likert-type scale, with responses ranging from "strongly disagree" to "strongly agree." A higher score indicates a trend towards institutionalized socialization tactics, while a lower score indicates individualized socialization tactics. The scale comprises six subscales to measure each of the six socialization tactics, and each subscale contained five items. Though the omnibus scale was reliable, several tactics' subscales demonstrated suboptimal reliability: informal-formal ($\alpha =$ 0.55), individual-collective ($\alpha = 0.79$), random-sequential ($\alpha = 0.80$), variable-fixed ($\alpha = 0.66$), disjunctive-serial ($\alpha = 0.43$), and divestiture-investiture ($\alpha = 0.44$). The pairs for each tactic were collapsed together to reflect three scales to measure each category based on what the tactics were mainly concerned with, as Jones (1986) described: context (informal-formal and individualcollective), content (random-sequential and variable-fixed), and social aspects (disjunctive-serial and divestiture-investiture). The effect of social aspects of socialization ($\alpha = .83$) was isolated to compare to the remaining two categories of context ($\alpha = .53$) and content tactics ($\alpha = .89$) that were collapsed into asocial tactics ($\alpha = .80$).

Newcomer Adjustment

Newcomer adjustment was conceptualized as role clarity, self-efficacy, and social acceptance (Bauer et al., 2007), and was measured using a 6-item 7-point Likert-type survey ($\alpha = 0.81$). Higher scores indicated better adjustment in high role clarity, self-efficacy, and perceived social acceptance.

Workplace Friendship

Workplace friendship was operationalized by opportunity and prevalence of workplace friendships (Nielson et al., 2000) and was captured using Nielson et al.'s (2000) 12-item scale ($\alpha = 0.96$), ranging from 1-5 responses to indicate "strongly disagree" to "strongly agree." A higher score indicates more opportunities and a higher prevalence of workplace friendships.

Media Richness

Daft et al. (1987) initially described a hierarchy of media richness based on the channel's ability to reduce equivocality and uncertainty, such that face-to-face communication is considered the richest medium, followed by telephone communication, written documents addressed to a specific recipient, written, formal or impersonal documents, and lastly numeric documents as the leanest medium. Though this provides a starting point to consider a media richness hierarchy among some communication channels, modern organizations include communication channels not initially explicated by Daft and Lengel (1986). An expanded media richness hierarchy was determined based on extant research, professional articles, and personal experience, and in consideration of the media richness as a medium's ability to a) send multiple cues through multiple channels of communication, b) support the use of language variety, c) provide instant feedback, and d) high degree on personal focus (Daft et al., 1987; Ferry et al., 2001). Thus, this study uses the following communication channels considered as richest 1) Teleconference (e.g., Zoom, Teams, Meet, Skype, etc.), 2) voice-one calls (phone, VoIP), 3) email, 4) Slack channels, 5) company social media, 6) company forums, 7) online documentation (Training manuals, reports, companywide announcements) (Brit, 2022; Bos et al., 2002; Daft & Lengel, 1986; Daft et al., 1987; Gareis, 2006; Lous et al., 2018; Wolff & Burrows, 2021). To address H5 and H6, 7 sets of 2 Likert-scale surveys were constructed for respondents to indicate

how often respondents used each communication channel to (a) adjust to their role and (b) develop friendships. Respondents indicated how frequently they used each channel for each function on a Likert-type scale, with responses ranging from "never used" (1) to "always used" (5).

CHAPTER IV: RESULTS

This section is divided into two parts for each type of analysis that was used. While these analyses were not used for triangulation, the thematic analysis does intrinsically provide further context that could explain the nuances in the quantitative analysis, and thus this results section is organized as follows. First, this section will describe the results of the quantitative analysis that was used to answer each of the hypotheses. Lastly, it will describe the results of the qualitative analysis that was used to answer the two research questions.

Quantitative Analysis

A bivariate correlation test was first conducted to confirm that the two dependent variables, newcomer adjustment and workplace friendship, were not correlated. There was no correlation between newcomer adjustment and workplace friendship, r (27) = .33, p = .084. To determine whether the more institutionalized socialization tactics used in virtual onboarding facilitate more positive newcomer adjustment, a multivariate regression was calculated, entering socialization tactics as the independent variable, and newcomer adjustment and workplace friendship as the outcome variable. The multivariate regression showed there was a statistically significant effect on respondent's institutionalized socialization tactic and (a) newcomer adjustment and (b) workplace friendship, F (2, 26) = 22.12, p < .001; Wilk's $\Lambda = .37$, partial $\eta^2 = .63$. Institutionalized socialization tactic had a statistically significant effect on both newcomer adjustment (F (1, 27) = 32.99; p < .001; partial $\eta^2 = .55$) and workplace friendship (F (1, 27) = 9.46; p = .005; partial $\eta^2 = .26$). Supporting both H1 and H2, institutionalized socialization tactics predict positive newcomer adjustment and workplace friendship.

To determine whether the social aspects of socialization tactics (i.e., serial and investiture) were the most influential socialization tactics to facilitate (a) positive newcomer

adjustment and (b) workplace friendship, a multivariate regression was calculated. Serial and investiture were collapsed together to indicate social aspects, while the remaining 4 tactics were collapsed together as asocial. The multivariate regression showed there was no statistically significant effect on (a) positive newcomer adjustment and (b) workplace friendship based on social aspect socialization tactics, F(2, 25) = .25; p = .781; Wilk's $\Lambda = 0.98$, partial $\eta^2 = .02$. Answering H3 and H4, the social aspects socialization tactics (i.e., serial and investiture) were not the most influential in facilitating positive newcomer adjustment and workplace friendships.

To answer H5, a Friedman test first indicated the seven identified media were used differently (Table 2), $\chi^2(6) = 56.84$, p < .001. Next, a paired samples *t*-test was conducted to determine the effect of media richness on newcomer adjustment. Results indicate significant within-respondent differences in the frequency of use of Zoom/teleconferencing (M = 1.41; SD = 1.78) and online documentation (i.e., training manuals, reports, companywide announcements) (M = 1.28; SD = 1.36), t(28) = 5.05, p < .001, for newcomer adjustment. Finally, a linear regression analysis was used to test if media richness significantly predicted newcomer adjustment, entering the frequency of use for each of the seven channels for newcomer adjustment as independent variables, and newcomer adjustment as the dependent variable. The model was significant, $R^2 = .65$, F(7, 21) = 5.50, p = .001; and revealed Zoom use was the only significant predictor (p < .001) of newcomer adjustment. As only one of the seven channels predicted newcomer adjustment and cannot compare channels based on media richness, we are unable to determine if Zoom was predicting newcomer adjustment due to its media richness or perhaps due to another unique feature, thus neither supporting nor rejecting H5.

To answer H6, a Friedman test was used to indicate if the seven media were used differently for workplace friendship (Table 3). The results showed there was a statistically

significant difference in the media richness used, $\chi^2(6) = 15.65$, p = 0.016. A linear regression was used to test if media richness significantly predicted workplace friendship. The overall regression was statistically significant, $R^2 = .71$, F(7, 20) = 6.86, p < .001. Both Zoom/teleconferencing ($\beta = .46$, p = .005) and company social media ($\beta = .72$, p = .002) significantly predicted workplace friendships, with company social media having the stronger effect size. To contrast the effect size of Zoom/teleconferencing and company social media, a

Table 2

Communication Channel	Mean Rank
Zoom (teleconferencing)	5.45
Online Documentation (training manuals, reports, companywide announcements)	5.12
Email	4.21
Voice-only calls	3.93
Slack Channels	3.72
Company Formals	2.98
Company social media	2.59

Ranking for Media Channel Frequency – Newcomer Adjustment

Table 3

Communication Channel	Mean Rank	
Zoom (teleconferencing)	4.98	
Company Forums	4.21	
Slack Channels	4.2	
Online Documentation (training manuals, reports, companywide announcements)	3.8	
Voice-only calls	3.64	
Company Social Media	3.61	
Email	3.55	

Ranking of Media Channel Frequency – Workplace Friendship

Fischer-z test was conducted (p = 0.081). This indicates that while there are two predictors of friendship, Zoom and company social media, company social media—the leaner channel—has a stronger effect on workplace friendships, counter to H6.

Qualitative Analysis

Thematic analysis (Clarke & Braun, 2006) was used to report and synthesize the openended questions regarding what strategies were beneficial in facilitating newcomer adjustment (RQ1) and workplace friendships (RQ2). The following section will discuss the themes and subthemes crafted for each research question. Table 4 illustrates the two themes and subthemes regarding newcomer adjustment, and Table 5 illustrates the three themes and subthemes among strategies that facilitate workplace friendships in virtual onboarding.

Themes in Strategies for Newcomer Adjustment

To address RQ1, initial coding was conducted to identify various ideas or feelings within the answers that described participants feeling confident and competent in their roles after extensively reviewing the responses and becoming familiar with the content. Codes were segments of the data that reflected an important idea or event from the virtual onboarding that made the respondents feel confident and ready for their role (Braun & Clarke, 2006). Responses included onboarding strategies such as newcomers being in team meetings and being encouraged to ask questions. From the 11 codes that were derived, patterns were identified among them that illustrated perceived strategies within the organization's onboarding that promote positive newcomer adjustment. After revisions of initially derived themes, the following two themes and subthemes were crafted.

Job Training. Job training reflects efforts coordinated by the organization that are focused on educating newcomers on how to complete necessary tasks, role responsibilities, and company missions. These training courses are held during employee orientation and are differentiated into asynchronous training and synchronous training.

Synchronous Training. Synchronous training are educational events that are attended virtually, at the same time as the instructor and other participants (Wrench, et al., 2015). Participants commented that synchronous training was helpful when joining the organization, as these events provided an opportunity for new employees to learn, collaborate with others,

Table 4

Facilitation	of Newcome	er Adjustment
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Main	Sub-	Codes	Description	Verbatim Examples
Themes	themes			
	Asynchronous	• Asynchronou	Training focused on	"[] having synchronous
Job	training	s training	task completion that	training was really helpful to
Training		• Simulations	is completed	learn how to do my job well"
			independently	"Watching videos [about] actua
				tasks being completed"
		• Synchronous		
	Synchronous	training	Training held with	"Receiving training other
	training	• Employee	other new hires that	newcomers. This allowed for
		orientation	allow an opportunity	free-flowing discussion and
			to discuss and ask	open to questions while
			questions	processes were explained"
		• Mentor	The newcomer can	"Having someone there to help
Peer		• Team	rely on the guidance	me with the questions I had and
Support		meetings	of their peers and	guide me as to what my role
		• Informal 1:1	assigned mentors	and responsibilities would be
		calls	related to their role,	was the most helpful."
			responsibilities, and	"Being assigned a mentor to
			priorities	show me what to do. It really
				helped that my mentor was a
				model employee"

Table 5

Facilitation of Workplace Friendships

Main	Sub-	Codes	Description	Verbatim Examples
Themes	themes			
		• Employee	Events coordinated to	"Orientation"
Macro-	Employee	orientation	focus on job training	"Receiving synchronous
level	Orientation	• Synchronous	among new hires	training"
		training		
				"Annual kick off where we met
		• Department	Events that gather	in person"
		meetings	everyone across the	"Meeting with other
	Professional	• Company	organization to discuss	departments to meet colleagues
	Meetings	meetings	business goals	The experience is a bit formal,
				so the relationships are more
				strictly for work"
		• Coffee chats	Events that are not	"Team coffee time. This
		• Happy hours	focused on business	happens virtually once a day ar
		• Games	goals, but rather	is option to join, but it's a spac
	Social	• Social	intended for enjoyment	where I've gotten to talk to and
	Events	events		connect with my co-workers"
				"[] being invited to social
				events with lots of other people
				in the organization. I think the
				social events (happy hours,

games) were the most beneficial and they were regular events"

Micro-		•	Mentor	Opportunities to	"[] When someone offered to
level		•	Team	develop friendships	help and we would get on a 1:1
			meetings	with the immediate	call I would get clear on how to
		•	Informal 1:1	team members by	proceed and in turn build rapport
			calls	transitioning from	with that person, therefore
				work conversations to	building a relationship with
				personal conversations	them"
					"I worked with other people to
					set up and learn about the tool I
					would be using and that gave me
					a chance to get to know my team
					members"
Media	Camera on	•	Video on	Cameras were on	"Being able to see each other's
Behaviors				during teleconferencing	face through teleconferencing
				meetings to create a	and seeing each other as people
				sense of connection	instead of just workers"
				sense of connection between members	instead of just workers"
					instead of just workers" "Our Slack channel has given
	Slack	•	Slack		·
	Slack channels	•	Slack channel	between members	"Our Slack channel has given
		•		between members Newcomers used	"Our Slack channel has given me the opportunity to develop
		•		between members Newcomers used company slack	"Our Slack channel has given me the opportunity to develop relationships with team
		•		between members Newcomers used company slack channels to develop	"Our Slack channel has given me the opportunity to develop relationships with team members very quickly"

and have a safe space to ask questions. One participant described, "The online training through zoom with my [on]boarding group allowed us to ask questions and also collaborate well." Another respondent commented, "Receiving training [...] with other new members. This allowed for free flowing discussion and open to questions while processes were explained." Synchronous training creates a designated space for newcomers to learn together and voice questions before starting their job responsibilities, as it is expected that newcomers are coming in with little to no knowledge of the exact requisites for their new role. Therefore, these events can empower newcomers to address any uncertainties they have about how to complete the required tasks and responsibilities of their roles, with the expectation that the training facilitator can provide the needed information.

Asynchronous Training. The second component of job training is asynchronous training, which allows newcomers to independently learn how to complete the tasks required for their role. Asynchronous allows participants to learn at their own pace, on their own schedule by accessing lectures, readings, modules, and other learning materials online (Wrench, et al., 2015). The focus of this subtheme is that the participants recognized that these training courses are intended to educate them on skills and tools to complete the required tasks for their job. One participant commented that "[...] having asynchronous training was really helpful to learn how to do my job well." Other participants commented that "Watching videos [on] actual tasks being completed" and "online training simulations" were the most beneficial for feeling ready and confident in their new role, as they illustrated the precise procedures the newcomers would be expected by their employer to perform. Asynchronous training, however, does not provide a space to collaborate or ask questions, as the information tends to strictly illustrate how tasks must be completed. Therefore, there is little need to discuss or negotiate meaning related to the content

in asynchronous training. In this subtheme, respondents are illustrating that self-study can be an effective means to learn the required information to develop the skills needed for their role, without having to collaborate with other members.

There was expressed emphasis that eventually these initial job training strategies need to clearly end so that the newcomer can transition into working on their task and learning through practice. While newcomers work with their immediate team and complete their tasks, their peers support the learning and development of the newcomers.

Peer Support. The final theme of strategies that facilitate newcomer adjustments is peer support. Once newcomers have completed the initial employee orientation, the employee starts working on tasks and assignments for their role. Respondents expressed that they adjusted to their roles with the aid of their peers, such as from their assigned mentor, informal one-on-one calls to collaborate on tasks with team members or their manager, and through team meetings.

Many respondents reported that having a designated mentor or buddy was the most beneficial in learning their role. One respondent noted, "Being assigned a buddy was the best part. My buddy and I still talk even post me leaving the company. He made me feel very comfortable and gave me a safe place to ask any questions I had." In this example, having a designated person to rely on for questions, affirmation, and guidance helped the participant feel secure to reach out to a mentor without concern. Additionally, a mentor is often an employee who is trusted by the organization and has exhibited expertise in their role (Kram & Isabella, 1985). Meaning the newcomer can rely on that person to receive quality information or advice. This was communicated by another respondent: "Being assigned a mentor to show me what to do. It really helped that my mentor was a model employee." This gave the newcomer confidence that the organization and the mentor were invested in their success, which was echoed by another

response stating, "Being assigned to advisors that are responsible for my career, peers, and executive decisions" was beneficial in adjusting to their role. Knowing that the newcomer had someone designated to guide them toward their success increased the newcomer's confidence in their role.

Aside from assigned mentors, newcomers rely on peers within their team. Collaborating with their immediate team provides an opportunity for newcomers to understand their role and their position within the company. One participant described they benefited from "Having someone there to help me out with the questions I had and advise me to what my role and responsibilities [are]." This includes the newcomer having conversations with their manager or team lead, which was mentioned by a respondent: "Discussions with my manager about responsibilities and priorities [was helpful]." From these sorts of conversations, the newcomer learns about the company culture, climate, and values, as described by one participant who noted "informal calls were beneficial for meeting others and absorbing the workplace culture." This illustrates that although not through a formally organized event, newcomers benefit from informal interactions with their peers where they can ask questions and talk about their roles. Conversations and direct inquiries about tasks not only help boost newcomer adjustment but also provides an opportunity to develop friendships within the organization.

Themes in Strategies to Facilitate Workplace Friendships

To explore RQ2, initial coding was conducted after being familiarized with the responses to identify various ways in which participants developed workplace friendships. Codes were segments of the data that reflected an important idea or event from the virtual onboarding that helped the respondents develop friendships at work (Braun & Clarke, 2006). Codes included: synchronous training with a group, participating in team meetings, being invited to company

events, being assigned a mentor, and using Slack channels for communicating with organization members. From the nine codes that were derived from the responses, patterns were identified that provided insight into the strategies within organizations' onboarding that promote workplace friendships and other meaningful relationships. This led to the creation of the following three themes: macro-level events, micro-level events, and media use behaviors.

Macro-Level Events. Macro-level events are events arranged by the organization that provide opportunities to develop friendships and meaningful relationships with other individuals within the organization, including people from outside the newcomer's immediate team or department. These events can be either formal or informal and include employee orientation, professional events, and social events.

Employee Orientation. Employee orientation are events that are coordinated with the specific goal of educating new hires on how to perform their job responsibilities. They will typically only include the training facilitator and the newcomers, and thus differ from other professional meetings that will include a broad range of organization members. The descriptions from respondents of how employee orientation can facilitate workplace friendships echoed sentiments from the previous section about newcomer adjustment. Participants noted they developed workplace friendships from "employee orientation" and "synchronous training" by being able to collaborate and talk with other newcomers. Employee orientation created a space for newcomers to instantly meet and connect with other members that are similarly new to the organization. This alone can create some comradery, as they are all adjusting to the organization together. But newcomers can also develop friendships through employee orientation as it is a shared experience that they are having together.

Professional Meetings. These events are intended by the organization to gather everyone across the organization to discuss business goals, missions, and progress. These events provide an opportunity for newcomers to meet people outside their immediate team such as "annual kick-offs" and "meeting with other departments to meet colleagues. The experience is a bit formal, so the relationships are more strictly for work." These events tend to be formal and perhaps mandatory. While these events may not always lead to close friendships, they provide an opportunity to develop meaningful work relationships that are needed to feel supported and integrated into the organization. Especially when working in a virtual environment, these events provide rare opportunities for newcomers to meet and interact with other organizational members outside of their department.

Social Events. Social events were repeatedly emphasized as being crucial for developing friendships at the workplace. These events are not focused on business goals, but rather intended for enjoyment and provide an opportunity for informal interactions between organization members. There were many different types of social events, as described by one respondent, "[...] being invited to social events with lots of other people in the organization. I think the social events (happy hours, games) were the most beneficial and they were regular events." Another respondent described a social event as, "Team coffee time. This happens virtually once a day and is optional to join, but it's a space I've gotten to talk to and connect with my coworkers." The respondents describe social event opportunities both on company time and outside of work that organization members can join. These events offer a chance for organization members to "share new experiences" that can bring them together. It is important to note that the respondents described the social events as being optional and regularly organized. This allows newcomers and other members to choose if and when they would like to participate. Those who attend the

events are doing so to connect with other organization members in a fun way. While these macro-level events bring newcomers into the fold of the larger organization, newcomers are likely to develop friendships with the peers they interact with more 'locally,' which brings us to the second theme.

Micro-Level Events. The second theme regarding strategies that facilitate workplace friendships is micro-level events. Micro-level events include opportunities between newcomers and their immediate team to connect. Some of the events referred to were team meetings and one-on-one calls with team members to tackle a task or problem, which then in turn resulted in building rapport and talking about personal matters. For example, one participant stated, "[...] when someone offered to help and we would get on a 1:1 call I would get clear on how to proceed and in turn build rapport with that person, therefore building a relationship with them." Similarly, it was expressed by another respondent, "I worked with other people to set up and learn about the tools I would be using and that gave me a chance to get to know my team members." Although in these examples, the interactions were prompted by task-oriented goals, they would transition into interpersonal conversations and self-disclosure. Participants also referred to being assigned a mentor who was a person the newcomer could feel "they are able to form a great and genuine connection with" and "helped me feel like I had a friend I could lean on." The mentor thus serves as both a designated person that the newcomer can rely on for information seeking and as a person to provide socio-emotional support. Having a mentor can help newcomers feel that they at least have one friend, or like one participant called a "buddy," that the newcomer can go to.

Regardless of the events that spurred interactions between newcomers and other organization members, it is important to note how these exchanges were being carried out in

computer-mediated interactions. The following and final theme provides insight into specific behaviors that newcomers employ when trying to develop friendships during their virtual onboarding.

Media Use Behaviors. The final theme regarding developing workplace friendships was media use behaviors. Media use behaviors reflect conscious actions that respondents noted helped develop friendships within the organization, including using the company Slack channel and having their cameras on during teleconferencing meetings. While behaviors were not often remarked on by respondents, the responses regarding this provide insight into how newcomers use communication channels. These behaviors reflect how they interact with the computermediated channels when attempting to develop friendships.

Slack Channels. Slack is a messaging app for intraorganizational communication that has features such as being able to host informational materials, private messaging, public channels that anyone can join, and private channels for specific members (Slack, n.d.). While other apps function comparably, Slack is well known for its channel features that can be used for both formal and informal communication. Some examples of popular Slack channels include #general, #announcements, #petpics, and #happyhour. Slack was noted by participants as giving them "the opportunity to develop relationships with team members very quickly" as "shooting the breeze allows you to get to know people more personally," which creates virtual asynchronous watercooler exchanges that are fundamental for relationship building. The opportunities to communicate with others through Slack channels are minimal risk and require minimal effort to respond to or view the messages in the channel thread. These types of interactions make Slack channels an easy and sustainable way to connect with other organization members.

Camera On. The second media behavior that was described by respondents was choosing to have the camera on during teleconferenced team or company meetings. Having the camera on was reportedly beneficial for a participant as "being able to see each other's face through teleconferencing and seeing each other as people instead of workers" helped build relationships. Being able to see the faces of team members while being distanced helped create a sense of personability, especially if most interactions are text-based. Although having cameras off during meetings can be common, especially to combat Zoom fatigue (Ratan et al., 2022; Riedl, 2021), having cameras on understandably would communicate the desire to be visible and approachable to others. This behavior, especially if reciprocated by other team members, can help build consequential workplace friendships.

The descriptive results of the thematic analysis provide insight into what strategies are being used effectively in virtual onboarding to facilitate newcomer adjustment and workplace friendship. The combination of both the quantitative and qualitative results present a picture of how current communication theories are supported and require reconsideration when viewed within the context of virtual onboarding to achieve positive outcomes. The following section will discuss the results and how they can inform both scholars and practitioners.

CHAPTER V: DISCUSSION

This study explores how virtual onboarding impacts newcomer adjustment and the development of workplace friendships in fully remote teams. As both workplace friendships and newcomer adjustment are correlated with intention to stay and job satisfaction (Allen, 2006; Feeley et al., 2008; Jones, 1986; Mignerey et al., 1995; Morrison, 2004; Sias & Cahill, 1998), it is important to evaluate how this is effectively executed in virtual work teams. Organizational socialization tactics and media richness theory were used as frameworks to explore which existing virtual onboarding strategies are most influential in facilitating newcomer adjustment and workplace friendships. The results of the study both support and contradict prior research regarding the impact of socialization tactics on newcomer adjustment, which could provide insight into how the effects of socialization tactics might change when considered within the context of current virtual work teams. The results also provide insight into how socialization tactics can have a strong influence on the opportunities and prevalence of workplace friendships. The thematic analysis of responses cast light onto what virtual onboarding strategies were implemented by organizations that were most effective for facilitating newcomer adjustment and workplace friendships. And lastly, results considering media richness present substantiating information that supports existing computer-mediated communication theories regarding the differing impacts of media richness for task-oriented goals versus interpersonal-oriented goals.

This section will discuss the results first of the impact of institutionalized socialization tactics, then the effect of social tactics, followed by details regarding the specific strategies employed by organizations that newcomers felt were the most effective for the two outcomes, and finally, the results regarding media used for newcomer adjustment and workplace friendship will be explored.

Effects of Institutionalized Socialization Tactics on Virtual Onboarding

Starting with newcomer adjustment, institutionalized socialization tactics have been linked to enhancing newcomer loyalty and reducing turnover by providing newcomers with a structured and formalized socialization process that reduces uncertainty as compared to individualized socialization tactics (Allen, 2006; Jones, 1986; Saks et al., 2007). As virtual teams can struggle with feelings of isolation, uncertainty, and developing trust and closeness with other virtual organization members (Hemphill & Begel, 2011; Henttonen & Blomqvist, 2005; Taser et al., 2022; Woo et al., 2022), the study anticipated that the formalized institutionalized tactics would minimize uncertainty and embed newcomers into the organization better than individualized socialization tactics. H1 was supported in that institutionalized socialization tactics continued to be more influential than individualized socialization tactics for facilitating positive newcomer adjustment during virtual onboarding. This is likely because institutionalized tactics create a standardized set of experiences and information that combats the challenges in dispersed teams. For example, the challenge of the potential lack of team cohesion in dispersed teams is addressed by being connected with existing organizational members in meetings and as role models (serial tactic), and the challenge of communicating complex information is solved by having standardized knowledge available online in the form of online documentation and training (fixed tactic). Therefore, consistent with research regarding the effects of socialization tactics on newcomer adjustment in collocated teams, these tactics continue to be beneficial for newcomer adjustment in virtual work teams. However, future research would benefit from taking a closer examination into how each socialization tactic is experienced within a virtual team, as the way in which information is presented, organization members interact, and the context in which they communicate likely not the same in collocated and dispersed teams.

Whereas the relationship between workplace friendships and socialization tactics had yet to be explored in prior research, this study predicted that the emphasis on integrating the newcomer into the organization through institutionalized tactics would promote opportunities for friendship and increase the prevalence of friendships in the workplace (Nielsen et al., 2000; Sias & Cahill, 1998). H2 was supported in that the institutionalized socialization tactics in virtual onboarding would also influence the development of workplace friendships. This further echoes the predominant characteristic of institutionalized tactics being the social dimensions that arise from these strategies (Allen, 2006; Jones, 1986; Saks et al., 2007). Institutionalized tactics, such as serial and collective tactics, can create opportunities for newcomers to integrate into the organization and get to know other newcomers and organizational members. Formally organized events, which will be discussed in more depth later on, can offer remote newcomers the needed opportunities to develop special peer relationships. This should prompt further research into the influences of socialization tactics in workplace friendships in collocated, remote, and hybrid teams. Given the extant research that supports that social aspects of socialization tactics are a dominant influence on newcomer loyalty and reducing turnover (Allen, 2006; Jones, 1986; Saks et al., 2007), this study also anticipated for this to be true when considering the influence of social aspects of socialization tactics on newcomer adjustment and workplace friendship. However, the results that will be discussed below refuted this.

Social Context-Socialization Tactics in Virtual Onboarding

Given that prior research had revealed that socialization tactics that address the social context of socialization (i.e., investiture and serial) were the most influential on newcomer adjustment (Allen, 2006; Bauer et al., 2007; Jones, 1984; Oh, 2018) and the emphasis on social dimensions for building relationships in virtual work teams (Feeley, 2008; Hemphill & Begel,

2011; Pauleen & Yoong, 2001b; Scott, 2013), H3 and H4 predicted that social tactics in virtual onboarding would have the strongest influence on newcomer adjustment and workplace friendship than the other two dimensions. However, these hypotheses were not supported. This conflicts with existing research regarding the social dimensions of socialization tactics on newcomer adjustment and relationship building. This prompts the question of what this discrepancy could tell scholars.

One aspect that may provide insight into this discrepancy in these results compared to prior research may lie in the reliability of the socialization scales. While the institutionalized socialization tactic scale as a conglomerate of the 6 subscales was reliable ($\alpha = 0.79$), some of the individual subscales were not statistically reliable, which poses the question of whether Jones' (1986) scale is appropriate for considering socialization tactics in a virtual environment. In particular, the subscales that measure formal tactics ($\alpha = 0.55$), fixed tactics ($\alpha = 0.66$), serial tactics ($\alpha = 0.43$), and investiture tactics ($\alpha = 0.44$) were not statistically reliable. Given the low reliability scores, scholars may benefit from examining Jones' (1986) survey questions to better measure the socialization experience within a modern virtual organization. Concerns about the reliability of Jones' (1986) socialization tactics scales have been examined before. A metaanalysis by Saks et al. (2007) revealed that although the original Jones' (1986) scale with six subscales provides stronger reliability than shortened versions of the original scale, there are still studies where the original scale is used where the reliability of several tactics remained problematic. This meta-analysis, in combination with the results of this study, may indicate that there should be revisions to Jones' (1986) scale, or perhaps the creation of a new organizational socialization scale for virtual organizations. The differences in socialization experiences may necessitate the creation of a new organizational socialization scale for virtual organizations. This

should prompt future research to review, improve, and refine the six scales to reflect the current organizational environments within collocated and dispersed teams.

Although not initially intended for triangulation, the open-ended questions in the online survey for the study provide more valuable insight into what respondents noted as being the most beneficial in adjusting to their role and developing meaningful relationships. Coincidently, there was a high emphasis on social strategies for information-seeking behaviors and relationshipbuilding, in addition to insight into content and context strategies that were beneficial for newcomer adjustment. The following section describes what respondents identified as successful strategies in their virtual onboarding.

Successful Virtual Onboarding Strategies

Facilitating Newcomer Adjustment

While existing literature provided some insight into what socialization tactics are likely to be important in facilitating newcomer adjustment in virtual work teams (Ahuja & Galvin, 2003; Allen, 2006; Jones, 1984; Korte, 2009; Korte, 2010; Korte & Lin, 2013; Woo et al., 2022), there was a need to identify what these socialization tactics look like in practice during virtual onboarding. Thus, RQ1 sought to explore what respondents noted were strategies used in virtual onboarding that facilitated them becoming confident and competent in their role. Through thematic analysis, job training and the peer support they received after orientation were identified as the most effective strategies to promote newcomer adjustment in virtual onboarding and what organizations should prioritize, first, I will review the nuances of job training and then conclude with peer support. **Job Training.** Job training focuses on providing newcomers with the information and tools needed to be able to complete the tasks associated with their roles and responsibilities. The main priority is reducing uncertainty surrounding how to perform their work and how to function within the organization (Petrilli et al., 2022). Job training had two subthemes regarding how the information was presented and available to newcomers: asynchronous and synchronous training.

Asynchronous training allowed newcomers to independently complete simulations and other videos regarding how to handle specific tasks, as opposed to synchronous training where the newcomers undergo the training session with other newcomers and facilitators. Respondents emphasized that in synchronous training, all new hires are learning together and are encouraged to ask questions and collaborate. Both types of training could be viewed as a formal tactic (the information is presented to new comers while being separated from the experienced group of members) and a collective tactic (learning experiences is designed to produce a standardized set of responses to specific situations; Van Maanen & Schein, 1977). However, the amount of social involvement differs between the two tactics. Asynchronous training does not rely on the social influence of others on the newcomer, as the newcomer is expected to complete the training on their own to reproduce specific steps, skills, or actions. The independence and flexibility the asynchronous training offers compliments well with the flexibility, privacy, and independence that individuals have when working in dispersed teams (Garabal, 2020; Lous et al., 2018; Reichert, 2019). But having some synchronous training in virtual teams encourages social interactions to help newcomers further understand information and offers a space to easily address any questions regarding the information. Having this balance between independent learning and group learning is beneficial for virtual groups since it balances the pros of remote work such as flexible work, independence in scheduling, and worker agency (Nordbäck et al.,

2017; Townsend et al., 1998), while addressing some of the concerns around remote workers not being able to socialize with others (Berry, 2011; Bojinov et al., 2021; Scott et al., 2022). Although job training is likely to continue as the employee progresses in their career at the organization, these early experiences in job training are especially influential on newcomers. Having synchronous training early in their organizational entry, preferably in the form of employee orientation, provides newcomers with social relationships early on by introducing them to other new and existing members in their remote organization. The benefits of creating connections with organization members are echoed in the following theme of peer support.

Peer Support. Peer support was remarked as being a helpful strategy for post-employee orientation and training. Respondents expressed that feeling they had someone to turn to for asking questions about tasks, responsibilities, and priorities was crucial for them to feel competent in their roles. Respondents described many forms of peer support, such as informal conversations with peers in their teams or having someone formally assigned as their mentor to help them with questions. Peer support serves as a serial tactic - having organization members act as role models for newcomers (Van Maanen & Schein, 1977). Having peer support also served as a means for newcomers to engage in information seeking behavior. As described previously, information seeking is the second antecedent to newcomer adjustment, along with socialization tactics (Bauer et al., 2007). Respondents indicated that they would proactively ask peers for assistance in completing tasks, which confirms prior research that stated virtual group members are more likely to use direct inquiry as an information-seeking tactic compared to newcomers in collocated teams, who are likely to use observation instead (Ahuja & Galvin, 2003; Morrison, 1993; Petrilli et al., 2022; Woo et al., 2022).

Another type of peer support that is important is formal mentorship. Respondents indicated that having a mentor made them especially confident, as they had a designated person to assist them. This also confirms prior research that indicate having a mentor, who is an organization member who has demonstrated expertise in their role and provides support and guidance to the newcomer (Caldwell & Peters, 2018; Kram & Isabella, 1985; Wetherell & Nelson, 2021), are important for information seeking as they minimize social costs related to direct inquiry (Hemphill & Begel, 2011; Miller & Jablin, 1999; Morrison, 1993).

Therefore, we see that for newcomers to adjust to their roles through virtual onboarding, there should be both effective job training that includes asynchronous training as well as provide a space for synchronous group training, in addition to having formal mentorships or peer support to continue to assist newcomers in information seeking after their initial job training. The combination of both effective job training with synchronous and asynchronous training and the peer support offered create a complete onboarding experience that will lead to newcomer adjustment, which is consistent with the model offered by Bauer et al. (2007). Bauer et al. describe socialization tactics and information seeking as the antecedents to newcomer adjustment, which we see in virtual onboarding as job training being the socialization tactics organizations choose to use to present required information and the peer support being the means for information seeking. To a notable degree, these strategies that facilitate newcomer adjustment are also present in respondents' answers regarding what facilitated workplace friendship, further illustrating the interconnectedness of these two outcomes.

Facilitating Workplace Friendship

As discussed earlier, workplace friendships are predictors of job satisfaction, organizational commitment, and decreased intention for turnover (Feeley et al., 2008; Morrison,

2004; Nielson et al., 2000). Therefore, it is in organizations' best interest to promote relationship building within the organization to boost retention, especially in virtual organizations or teams where relationship building might be more challenging (Hemphill & Begel, 2011; Petrilli et al., 2022; Pauleen & Yoong, 2001b; Scott, 2013). RQ2 sought to uncover what strategies used in virtual onboarding respondents believed facilitated the development of workplace friendships. The thematic analysis provided insight into how the organization provides varying levels of opportunities at both micro- and macro-levels, as well as how media behaviors are intentionally implemented to boost relationship building.

Macro-Level Events. The macro-level events that organizations offer during virtual onboarding for newcomers to develop meaningful relationships include employee orientation, professional meetings, and social events. These events provide the necessary conditions for friendships to develop in the workplace that were outlined by Sias and Cahill (1998): contextual conditions, individual conditions, and communication change. Contextual factors include proximity, shared tasks, and extra-organizational socializing; individual factors are perceived similarities and personality affinity; and communication change refers to increased discussion of non-work and personal related topics and decreased caution (Sias & Cahill, 1998). This indicates that virtual organizations can meet these same conditions that are described in collocated organizations, although they may look a bit different.

Employee orientation, which includes training events where newcomers experience the training synchronously together, offers both contextual conditions and individual conditions for friendship. The perceived proximity is achieved even while working virtually by hosting the training events synchronously to offer the affordances of face-to-face interactions within a virtual space (Ahuja & Galvin, 2003; Bos et al., 2002; Cramton, 2002; Crowston et al., 2007; Oshri et

al., 2007; Pauleen & Young, 2001b). Additionally, these events become shared experiences where they can relate with one another with their similarity of everyone being newly joined into the organization, thus achieving the individual factors. This is similar to the second theme of macro-level opportunities, professional meetings. Professional meetings are events that the organization organizes to gather people from across the company to reflect on business goals. This provides the necessary contextual conditions for friendships by bringing everyone together to focus on shared goals but may not be as successful in creating friendships as the final theme. Social events are especially beneficial for developing workplace friendships as they include all three conditions. Respondents referred to social events, such as coffee chats, games, and other activities, as being optional events that are not focused on business goals but instead are intended to be opportunities to have fun and socialize. Respondents mentioned social events that were both on company time and outside of work that organization members can join. Having social events during work hours thus communicates that the organization values and incentivizes organization members to take time to develop relationships with other colleagues, despite not necessarily seeing those colleagues on a regular basis if they are outside of their work team. Additionally, having opportunities provided by the organization to meet outside of work reflects the circumstance that while organization members may work remotely, the members are not necessarily locally distanced. This proximity should allow organizations to have members meet in person on occasion, which previous literature has demonstrated increase trust and relationship building (Pauleen & Yoon, 2001b). This provides a change in communication by not having to discuss work and allows members to focus on enjoying a fun shared experience. Organizations should therefore continue creating events to allow organization members to socialize with nonwork-related experiences (Hemphill & Begel, 2011; Sias & Cahill, 1998).

Micro-Level Events. Aside from large events, there are micro-level opportunities to build relationships during newcomers' virtual onboarding. These are simulated 'local' opportunities to develop friendships with the newcomer's immediate team. These events often occur as informal conversations with team members, managers, and mentors. This does support prior research that shows remote newcomers rely on informal one-on-ones with peers to feel integrated into the organization and to address relational uncertainty (Ahuja & Galvin, 2003; Woo et al., 2022). Respondents noted that often in these one-on-one conversations, discussions around how to complete a task then transform into more personal topics and build rapport. This result supports a computer-mediated communication theory regarding the development of interpersonal relationships in computer-mediated interactions that media richness theory does not fully explain.

Social information processing theory (SIP) states that extended interaction will provide sufficient information exchange for computer-mediated communicators to develop stable interpersonal relationships (Walther, 1992; Walther & Burgoon, 1992). Since computer-mediated communication allows less total information per exchange compared to face-to-face exchanges, it will take longer for relationships to develop and progress in computer-mediated communication than in face-to-face interactions but will ultimately reach equitably relational development. Groups utilizing computer-mediated communication, regardless of being low or high richness, can develop positive relationships with trust, social orientation (rather than task orientation), and increased informality over time as virtual groups work together (Walther & Burgoon, 1992). This can be seen in respondents' descriptions of moving from task-oriented conversations to more personal topics the more they interacted with each other in one-on-one meetings or team meetings. In the respondents' account, there is more emphasis on how the

conversation progressed over time that led to their relationship building, rather than what media was being used. However, there were a few comments on *how* media was used to support relationship building in virtual teams that are important to discuss.

Media Use Behaviors. Lastly, media behaviors were identified as the last theme in onboarding strategies that facilitate workplace friendships. Respondents noted that having their cameras on during teleconferencing meetings was helpful to feel like they were connecting with their coworkers as real people. This does support prior research (Bos et al., 2002; Sprecher, 2006) that concluded video and audio-conferencing lead to higher trust development as compared to text-based interactions, yet the difference between video and audio conferencing was nearly indiscernible. Being able to connect a voice and name to a face helps build a sense of personability within the team when members are physically and temporally dispersed. The ability to observe teammates in meetings or while working is important for newcomers to learn how work is accomplished, set reasonable expectations, and learn from their team's knowledge (Hemphill & Begel, 2011). This will be further discussed in the following section when considering H6.

Additionally, there were comments from respondents about using Slack channels to easily form or maintain relationships with people from other parts of the organization. Slack is an intraorganizational social media app that acts as a group-wide media where information can be received across the organization. The noted benefits of using Slack channels to build relationships is consistent with previous research that state organizations should select communication channels that allow for information exchanges that facilitate relationship building between weakly tied colleagues and strongly tied friends (Haythornthwaite, 2001). Having tools and communication channels such as this is important for newcomers to have the

opportunity to engage in informal communication and not feel left out of social relationships (Hemphill & Begel, 2011). Organizations should be mindful of what media they have available within their teams, as externally imposed structures will impact intragroup communication patterns (Haythornthwaite, 2001). This brings up how media use affects newcomer adjustment and workplace friendships in the final two hypotheses.

Media Used for Newcomer Adjustment and Workplace Friendship

As was described in media behaviors, virtual teams interact with a variety of different communication channels for synchronous and asynchronous communication. Virtual onboarding attempts to educate newcomers on a variety of complex information related to the newcomer's new role, responsibilities, and organization. As such, organizations must choose how they will communicate this information to newcomers in a way that creates clear expectations. Informed by media richness theory, H5 predicted that using richer media during virtual onboarding would facilitate newcomer adjustment as rich media reduces equivocality and uncertainty (Daft et al., 1987; Daft & Lengel, 1986). However, H5 was not fully supported or rejected. Although Zoom – which is the richest media of the listed communication channels – was a statistically significant predictor of newcomer adjustment, it was the only communication channel that was significant. Therefore, it is not possible to compare Zoom's media richness to the other available communication channels and cannot clearly confirm or deny if the richer media will be the most influential.

However, it is noteworthy that Zoom was statistically significant. This does express that rich media has an impact on newcomer adjustment, although it could be due to any number of the features available on Zoom. Zoom does provide audio and visual communication, the effects of which are nearly indistinguishable from the effects of face-to-face interactions (Bos et al.,

2002; Sprecher, 2014). Since uncertainty reduction is a priority to achieve newcomer adjustment (Bauer et al., 2007), the richness of Zoom and other teleconferencing systems (i.e., being able to have instant feedback, access to multiple verbal and nonverbal cues, and personal focus; Daft et al., 1987) allow newcomers to receive the required information they need to achieve role clarity, increase self-efficacy, and increase perceived social acceptance when maximized by the users. Future research should, however, attempt to replicate this study at a larger scale to confirm if other communication channels are significant predictors of newcomer adjustment to compare the effect of media richness.

In attempting to predict if media richness has an effect on the development of workplace friendships, H6 predicted that the richer media would facilitate the development of workplace friendships, as the reduced equivocality might lead to shared understanding, perceived similarity, and mutual self-disclosure needed to develop and deepen friendships (Pillemer & Rothbard, 2018). The results of the study did not support H6, as both Zoom and social media significantly predict workplace friendships, however, the company's social media had the stronger effect compared to Zoom. Therefore, the richest media was not the most influential. This provides insight into how the division of where media richness ceases to be impactful for virtual teams. Although media richness can be helpful as a way to consider task-oriented interactions, it does not provide a sufficient framework for the complexities of building close relationships in a mediated environment. However, media multiplexity can provide a theoretical framework to better explain the impact of media channels on workplace friendships.

Haythornthwaite (2000) presents media multiplexity, which posits online group members engage with different media to support multiple goals. However, individuals do not maintain the same relationship via the same media. Strongly tied members (i.e., workplace friendships and

close friendships) will compensate for the lack of face-to-face interactions by exerting extra effort to maintain virtual proximity by using multiple media. This includes temporally collocating by using synchronous media, using asynchronous media in a near-synchronous manner, and by continuously being in contact with each other via asynchronous media (Haythornthwaite, 2000; Haythornthwaite, 2001; Haythornthwaite, 2005). This means that media richness is not the determining factor, but rather the media that is simply available and the strength of the relationship tie that determines which communication channel is used to develop workplace friendships.

Practical Implications

This study provided insight into the effects of organizational socialization tactics, media richness, and virtual onboarding strategies on newcomer adjustment and workplace friendships. While the study offers valuable theoretical implications, there are key takeaways that learning and development practitioners could implement in their onboarding strategies for remote work teams. The following are four key recommendations based on the findings of this study.

1. Organize regular social events and meetings. Having events regularly available is beneficial for creating common ground as they are sharing this experience together and gathering social capital, boosting trust among members, and encouraging collaboration (Cramton, 2002; Korte & Lin, 2013; Olson & Olson, 2000; Scott et al., 2022; Woo et al., 2022). As noted by respondents, having opportunities to interact with organization members was crucial for both mastering their roles and developing relationships with other organization members. There should be a variety of formal professional meetings and optional social events to balance tasks and interpersonal goals. Having a variety of events where organization members interact with one another, can visibly see each other, and bring distanced organization members together with

virtual proximity will combat loneliness and decrease uncertainty for the organization's remote newcomer (Petrilli et al., 2022; Scott et al., 2022; Stuchlik & Wood, 2021b; Taser et al., 2022). And when possible, providing an opportunity for in-person meetings would be beneficial for both relationship building and sharing information (Garabal, 2020; Lous et al., 2018).

2. Assigning remote newcomers to a mentor. The benefits of having a mentor were echoed multiple times in helping newcomers adjust to their roles and prompted future meaningful relationships (Karm & Isabella, 1985; Petrilli et al., 2022; Stuchlik & Wood, 2021a). Having an assigned mentor gives the newcomers a resource for information seeking about both task needs and interpersonal needs. Mentorship relationships will serve to continue to provide valuable resources and should not be overlooked within onboarding strategies.

3. Be intentional about the media available for newcomers and organization members to use. While online communication is not always entirely different from face-to-face communication, as can be observed in audio and video-mediated communication (Bos et al., 2002; Sprecher, 2014), the channels that the organization has available will influence how members interact with each other. Organizations should select social media technology and other communication channels that allow for visibility, persistence, editability, and association (Treem & Leonardi, 2012). Having a variety of media will allow remote team members to choose different types of media for different purposes, including collaborating, exchanging information about work, socialization, and emotional support (Haythornthwaite, 2001). It is important to remember that the type and number of media used to communicate with others will depend on the relationship's strength and the intended purpose.

4. Consider incorporating virtual communication training. The development of trust, understanding, liking and collaboration is important for virtual teams to be successful (Lilian,

2014; Pauleen & Yoong, 2001a; Walther & Bunz, 2005). Virtual teams that experience virtual communication training that communicate some rules and best practices for communicating within their team have reported an increase in team trust, openness, commitment to team goals, and work performance (Pauleen & Yoong, 2001a; Walther & Bunz, 2005; Warkentin & Beranek, 1999). Virtual communication training sets expectations about the timeliness to email responses, overtly acknowledging messages, and how to use the available media. As described by participants, having cameras on during meetings and using social media channels intentionally helped develop important relationships at work. Therefore, it would be beneficial to establish Zoom etiquette within virtual teams to promote communication habits that will help relationship building while also addressing potential risks, such as Zoom fatigue (i.e., the emotional and psychological distress caused by prolonged time on Zoom and being hypervigilant on one's own nonverbal facial expressions; Kuhn, 2022; Ratan et al., 2022; Riedl, 2021). A few ways to mitigate Zoom fatigue while also capitalizing on Zoom's relationship building capabilities is to educate organization members on how to turn on/off the mirror view on Zoom so individuals do not see their own camera reflected back to them or have designated meetings where cameras can be on/off. Having training that is specific to how the organization wants to encourage computer mediated communication, without enforcing rigid rules but rather guidelines and expectations, will reduce uncertainty about how to interact with others and allow for social interaction to flourish.

Study Limitations and Future Research

The sample size for this study was smaller than ideal, with only 29 responses. Due to time constraints and in an effort to reach a more industry diverse sample collection, mTurk was used to gather more respondents in addition to using LinkedIn. While nearly 200 responses were

received, only 29 were complete, trustworthy, and met the necessary criteria for inclusion. After consideration of the mechanics and lack of user validity with regards to potential bot responses, I would advise against future researchers using MTurk for survey responses. Therefore, in future data collection for this research I would recommend adding more attention checks to the survey to ensure respondents are attentive during the survey and to easily identify potential artificial intelligence responses.

I looked at a cross-section of industries, however there are likely still differences based on industry that was not able to be parceled out. Future research could investigate the virtual onboarding experience of specific industries to gather a more in-depth understanding of those industries. Future research may also benefit from replicating this study as a case study within specific organizations to study newcomers undergoing virtual onboarding in real-time. This would ensure accurate and detailed recall of their virtual onboarding experience, as well as a larger sample to draw results.

Given the meta-analysis of Jones' (1986) socialization tactics scales and the results of this study when considering a virtual environment (Saks et al., 2007), future scholars should analyze the accuracy of the socialization tactic scales within the context modern organizations. Additionally, there may be the need for a separate scale to measure socialization tactics within virtual organizations. Certain survey items, such as Q2 for collectivism tactics, Q2 for formal tactics, Q4 for investiture tactics, Q4 for sequential tactics, Q3 for serial tactics, and Q4 for fixed tactics may need to be adjusted to reflect the communication patterns that happen in virtual environments, as the reliability tests indicated reliability scores would have increased if these items were deleted. This may indicate that the scale items need to be revised to better capture the socialization tactics they are attempting to measure. Thus, future research should closely

examine how each socialization tactic is experienced within virtual teams as compared to collocated teams.

Lastly, the results of this study do indicate media richness theory may provide insight into newcomer adjustment in virtual teams. Future research should consider evaluating media richness on newcomer adjustment with a larger study to confirm if other communication channels significantly predict newcomer adjustment, aside from Zoom or teleconferencing platforms. This would further explore the utility of media richness theory in computer mediated communication.

CHAPTER VI: CONCLUSION

The findings of this study offer insights into modern virtual onboarding practices and how it impacts newcomer adjustment and workplace friendships. Organizational socialization tactics were used to understand how virtual onboarding strategies influence newcomers as they learn their roles and develop relationships. The results regarding how newcomers use media and the impact of those media provide theoretical insight into how media richness can assist newcomer adjustment, while other computer-mediated communication theories are more appropriate for understanding the development of friendships, such as SIP (Walther & Burgoon, 1992) and media multiplexity theory (Haythornthwaite, 2000).

While virtual work teams existed before COVID-19, the pandemic forced many organizations to adopt remote teams. Even as restrictions eased, many organizations chose to continue remote work (MacKenzie et al., 2022; Sibisi & Kappers, 2022; Stevenson, 2021; Stuchlik & Wood, 2021a). Although fully remote teams may transition to hybrid models or more in-person interaction, the best practices derived from the results can improve the experience of virtual work moving forward.

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APPENDIX A: RECRUITMENT STATEMENT FOR LINKEDIN

Hello! My name is Ertemisa Godinez. I'm a communication graduate student at Illinois State University. I'm kindly asking for your participation in my thesis study exploring how the virtual onboarding experience for recent new hires to fully remote teams facilitated their relationships and success in their team. Participants must have joined a fully remote team within the last 12 months and had their onboarding experience completely virtual.

This study involves completing an online survey to share more details about your experience. Participation is entirely voluntary, and you can choose to withdraw at any time. Additionally, the study is completely confidential.

If you meet the criteria and would like to participate in this study, please click the link below. If you could kindly share this post with those you think would be interested or meet the criteria, it would be greatly appreciated!

Thank you for your time and participation!

Sincerely,

Ertemisa Godinez

APPENDIX B: INFORMED CONSENT

Graduate student, Ertemisa Godinez, in the School of Communication at Illinois State University, under the advisement of Lance Lippert, Ph.D., is conducting a research study on virtual onboarding strategies. You are asked to participate in this survey if you are an employee on a fully remote/virtual team and underwent a virtual onboarding program within the last 12 months.

Purpose of the Research Study: The purpose of this research study is to examine how onboarding strategies for virtual teams facilitated your adjustment to your organization and the development of workplace friendships.

Procedures and Length of Participation: If you choose to participate, you will be using a computer to complete an online questionnaire regarding your virtual onboarding experience. You will be asked a series of open-ended questions including information regarding your background, your profession/industry, and your virtual onboarding experience. You should expect to complete the entire study within about 30 minutes.

Risks and Benefits of Being in the Study: There are no anticipated risks of participation beyond everyday life. Your involvement in this research will have you reflect on your experiences with virtual onboarding. Although there are no immediate benefits to participation, your participation will help scholars understand the relationship between virtual onboarding strategies and social relationships. **Compensation:** Your time and attention for completing this survey is recognized. If you complete this survey via M Turk, you will be compensated \$1 for your participation. There is no compensation for those not using M Turk to complete the survey, however your participation is still very much appreciated.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not result in any penalty or loss of benefits to which you are otherwise entitled, and you are free not to answer any question or discontinue participation at any time.

Confidentiality: The records of this study will be kept as private as possible on the Illinois State University computer system. In published reports, there will be no information included that will make it possible to identify you as a research participant. An unknown number of university employees will have access to the University-stored records; while only the researchers will have access to the records on the private computer. To help make you comfortable in providing open and honest responses, we are employing a survey system that records all your answers anonymously.

Contacts and Questions: If you have concerns or questions about this study, please contact Ertemisa Godinez at <u>egodine@ilstu.edu</u>. The researcher supervising this research study, Lance Lippert, PhD., can be contacted at <u>llipper@ilstu.edu</u>. If you have any questions about your rights as a participant, or you feel as if you have been placed at risk, contact the Illinois State University Research Ethics & Compliance Office at (309)-438-5527 or <u>IRB@ilstu.edu</u>.

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To consent in participating, please click the "Next" button below. Please print and keep this information sheet for your records. By **proceeding**, **I am consenting to participate in this study**.

APPENDIX C: ONLINE SURVEY

Pt. I Introductory/criteria survey:

1. In order to participate in this study, you must have recently experienced a virtual onboarding program within the last 12 months to join a fully virtual/remote team.

Please note: online/virtual onboarding refers to efforts made by the organization, using online technology, to integrate employees into remote teams while members are physically distanced.

Do you meet the criteria stated above? [[if no, force skipped to the end of survey]]

- 2. What industry do you work in?
- 3. What is the role you were onboarded for?
- 4. What is your age?
- 5. What is your gender?
 - a. Male, Female, Nonbinary/third gender, prefer not to say
- 6. When did you start this virtual onboarding program?

<u>Pt. II Socialization tactics scale Jones, 1986 (</u>7-point Likert scale: Strongly disagree, disagree, somewhat disagree, neither agree nor disagree, somewhat agree, agree, strongly agree) The following questions will ask you to consider your experience with your organization's virtual onboarding. Please rate the degree to which you agree with the statements. Please note: virtual or online onboarding refers to efforts made by the organization, using online technology, to integrate employees into remote teams while members are physically distanced. [Tactics collective versus individual]

- 1. During the virtual onboarding, I was extensively involved with other new recruits in common, job-related training activities.
- 2. Other newcomers have been instrumental in helping me to understand my job requirements.
- 3. This organization puts all newcomers through the same set of learning experiences.
- 4. Most of my training has been carried out apart from other newcomers. (R)
- 5. There is a sense of "being in the same boat" among newcomers in this organization.

[Formal versus informal]

- 1. During my virtual onboarding, I went through a set of training experiences that are specifically designed to give newcomers a thorough knowledge of job-related skills.
- During my online training for this job, I was normally kept apart from regular organizational members.
- 3. I did not perform any of my normal job responsibilities until I was thoroughly familiar with departmental procedures and work methods.
- 4. Much of my job knowledge has been acquired informally on a trial-and-error basis. (R)
- 5. I have been very aware that I am seen as "learning the ropes" in this organization.

[Investiture versus divestiture:]

- 1. My virtual onboarding made me feel that my skills and abilities are very important in this organization.
- 2. Almost all of my colleagues have been supportive of me personally.
- 3. I have had to change my attitudes and values to be accepted in this organization. (R)
- 4. My colleagues have gone out of their way to help me adjust to this organization.

5. I feel that experienced organizational members have held me at a distance until I conform to their expectations. (R)

[Sequential versus random:]

- 1. The virtual onboarding clearly explained the way one role leads to another or one job assignment leads to another in this organization.
- 2. Each stage of the online training process has, and will, expand and build upon the job knowledge gained during the preceding stages of the process.
- The movement from role to role and function to function to build up experience and a track record is very apparent in this organization.
- This organization does not put newcomers through an identifiable sequence of learning experiences. (R)
- 5. The steps in the career ladder are clearly specified in this organization.

[Serial versus disjunctive:]

- 1. Experienced organizational members see advising or training newcomers as one of their main job responsibilities in this organization.
- 2. I am gaining a clear understanding of my role in this organization from observing my senior colleagues.
- 3. I have received little guidance from experienced organizational members as to how I should perform my job. (R)
- 4. The virtual onboarding gave little or no access to people who have previously performed my role in this organization. (R)
- 5. During the virtual onboarding, I have been generally left alone to discover what my role should be in this organization. (R)

[Fixed versus variable:]

- 1. I can predict my future career path in this organization by observing other people's experiences.
- 2. My virtual onboarding gave me a good knowledge of the time it will take me to go through the various stages of the training process in this organization.
- My virtual onboarding clearly communicated that my progress through this organization will follow a fixed timetable of events.
- 4. I have little idea when to expect a new job assignment or training exercise in this organization. (R)
- 5. Most of my knowledge of what may happen to me in the future comes informally, through the grapevine, rather than through regular organizational channels. (R)

<u>Pt. III Newcomer adjustment (</u>5-point Likert scale: Strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree)

[Role Clarity]

The following section will ask you to consider how your virtual onboarding helped you understand and master the role you entered. Please rate the degree to which you agree with the statements.

- My online onboarding/training helped me understand my role and how to prioritize tasks I am responsible for.
- 2. My virtual onboarding helped me understand how my role influences or interacts with other roles and responsibilities in the organization

[Self-efficacy]

The following question will ask you to consider how your virtual onboarding helped you gain confidence in your ability to succeed in the role you entered. Please rate the degree to which you agree with the statements.

- 1. My online training clearly explained to me what my tasks and responsibilities were
- My online training made me feel confident and competent to carry out my tasks and responsibilities

[Social acceptance]

The following question will ask you to consider how your virtual onboarding helped you feel socially accepted by the organization/your team. Please rate the degree to which you agree with the statements.

- 1. My online/virtual training/onboarding made me feel connected to the values of the organization
- 2. I felt liked and trusted by my peers

<u>Pt. IV Workplace friendship scale Nielsen et al, 2000</u> (5-point Likert scale: Strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree)

[Opportunity Dimension]

This section will ask you to consider how your virtual onboarding gave you the opportunity to meet your coworkers. Please rate the degree to which you agree with the statements.

- 1. My virtual onboarding gave me the opportunity to get to know my coworkers.
- 2. My virtual onboarding helped me be able to work with my coworkers to collectively solve problems

- 3. My virtual onboarding presented me with the chance to talk informally and visit with others.
- 4. My virtual onboarding encouraged communication among employees.
- My virtual onboarding showed me opportunities to develop close friendships at my workplace.
- 6. My virtual onboarding expressed that informal talk is tolerated by my organization as long as the work is completed.

[Prevalence Dimension:]

This section will ask you to consider how your virtual onboarding helped you form close relationships or friendships. Please rate the degree to which you agree with the statements.

- 1. I have formed strong friendships because of my virtual onboarding.
- 2. I socialize with coworkers outside of the workplace because of my virtual onboarding.
- 3. I can confide in people at work because of my virtual onboarding.
- 4. I feel I can trust many coworkers a great deal because of my virtual onboarding.
- Being able to see my coworkers is one reason why I look forward to my job because of my virtual onboarding.
- 6. I do not feel that anyone I work with is a true friend because of my virtual onboarding.
 - (R)

Pt V. Communication channels

During your onboarding process, please indicate how much you used each of the following channels to learn your role and make friends at your workplace. (Likert scale: Never, Sometimes, about half the time, Most of the time, Always)

Teleconfere	Learning	NeverSometimesAbout half the timeMost of the time
nce (e.g.,	Your Role	Always
Zoom,		
Teams,		
Meet,		
Skype, etc.)		
	Friendships	NeverSometimesAbout half the timeMost of the time
		Always
Voice-only	Learning	NeverSometimesAbout half the timeMost of the time
	-	
calls (phone,	Your Role	Always
VoIP)		
	Friendships	NeverSometimesAbout half the timeMost of the time
		Always
Email	Learning	NeverSometimesAbout half the timeMost of the time
	Your Role	Always
	Friendships	NeverSometimesAbout half the timeMost of the time
		Always
Online	Learning	NeverSometimesAbout half the timeMost of the time
Documentati	Your Role	Always
on (Training		

Friendships	NeverSometimesAbout half the timeMost of the time
	Always
Learning	NeverSometimesAbout half the timeMost of the time
-	
Your Role	Always
Friendships	NeverSometimesAbout half the timeMost of the time
	Always
Learning	NeverSometimesAbout half the timeMost of the time
Your Role	Always
Friendships	NeverSometimesAbout half the timeMost of the time
	Always
Learning	NeverSometimesAbout half the timeMost of the time
Your Role	Always
Friendships	NeverSometimesAbout half the timeMost of the time
	Always
	Learning Your Role Friendships Learning Your Role Friendships

Pt. VI Open ended questions

What part of your virtual onboarding experience (i.e., initial employee orientation, being assigned a mentor, receiving synchronous/asynchronous training, being invited to social events, etc.) was the most beneficial for you to feel ready and confident in your new role? Please describe.

What part of your virtual onboarding experience (i.e., initial employee orientation, being assigned a mentor, receiving synchronous/asynchronous training, being invited to social events, etc.) was the most beneficial for you to develop friendships and meaningful relationships at work? Please describe the experience and the relationship.