Knowing Where You Stand: Physical Isolation, Perceived Respect, and Organizational Identification Among Virtual Employees

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This research investigates the relationship between virtual employees' degree of physical isolation and their perceived respect in the organization. Respect is an identity-based status perception that reflects the extent to which one is included and valued as a member of the organization. We hypothesize that the degree of physical isolation is negatively associated with virtual employees' perceived respect and that this relationship explains the lower organizational identification among more physically isolated virtual employees. In two field studies using survey methods, we find that perceived respect is negatively associated with the degree of physical isolation, and respect mediates the relationship between physical isolation and organizational identification. These effects hold for shorter- and longer-tenured employees alike. Our research contributes to the virtual work literature by drawing attention to physical isolation and the important but neglected role of status perceptions in shaping virtual employees' organizational identification. We also contribute to the literature on perceived respect by demonstrating how respect is affected by the physical context of work.

Key words: organizational identification; virtual work; telecommuting; respect; social status; isolation; physical context of work
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Introduction

One of the most revolutionary changes in the daily experience of work is the array of novel work arrangements used in organizations today. Whether referred to as virtual work, remote work, telecommuting, telework, or distributed work, a key feature of these alternative work modes is their departure from the prototype of employees working in a central office alongside coworkers and in view of supervisors.[1] Although employees' general responsibilities and tasks often remain the same, virtual work fundamentally changes the work environment and the ways that employees engage with the organization and interact with other members (Golden et al. 2008). This has triggered speculation that virtual work modes that physically separate employees from the organization and its members jeopardize the employees' feelings of belonging and organizational identification (e.g., Thatcher and Zhu 2006, Wiesenfeld et al. 2001) as well as their sense of status within the organization (Cooper and Kurland 2002).

Perceptions of one's own status or place in an organization are primarily understood with respect to identity. Social identity research refers to status within the organization as "respect," which reflects employees' beliefs that they are valued members of the organization (De Cremer and Tyler 2005).[2] Conventional wisdom suggests that virtual work alters the nature of individuals' interpersonal interactions with fellow organization members, diminishing "face time" (Van Dyne et al. 2007) and thus potentially endangering the individuals' social standing. Moreover, anecdotal accounts suggest that virtual employees care a great deal about the impact of their work arrangements on their perceived value and influence in the workplace (Blake 2010, Nilles 1994). Yet no prior empirical studies of virtual work have explored issues related to status and respect.

Given that respect is an identity-related perception that is dependent on and communicated in the context of social interactions, it is likely that it is not virtual work per se but rather features of virtual work arrangements that shape respect in the organization. This necessitates closer consideration of the ways in which the physical attributes of virtual work arrangements can differ. Prior virtual work research offers a taxonomy classifying types of virtual work with regard to hours, location, schedule, and impetus for the arrangement (Feldman and Gainey 1997). A critical feature underlying the hours

and location dimensions is physical isolation. In many organizations, including those that are committed to virtual work, there is substantial variance in employees' level of physical isolation. We define *physical isolation* as employees' experience of working in settings in which they are not colocated with fellow organization members. Home-based telecommuting is physically isolating, but employees who do their work in coffee shops, airports, hotels, multiorganization satellite centers, and peripheral client sites away from coworkers may be just as physically isolated. Virtual work and physical isolation are not synonymous and may be unrelated. For example, employees working alongside team members (e.g., consulting project teams, sales, and service teams) on the road, at client sites, or in proprietary satellite work centers may be working virtually but are not physically isolated.

The current research extends our understanding of the role of physical context in virtual work by identifying the relationship between physical isolation and employees' experiences of their organizational membership in general and their perceived respect in particular. Our central argument is that the degree of physical isolation is a key underlying dimension of different virtual work contexts that undermines employees' perceptions of how respected they are within the organization. Furthermore, it is this negative effect of physical isolation on perceived respect that accounts for why employees who are more physically isolated may identify less strongly with their organizations. We address gaps in the virtual work literature by exploring virtual employees' social standing and the physical isolation associated with virtual work locations.

Virtual Work and Physical Isolation

Prior research on virtual work has compared virtual work to traditional in-office work (e.g., DuBrin 1991) and considered the implications of virtual work frequency or intensity (i.e., the amount of time that employees spend outside of a centralized office location during their regular work week; e.g., see Bailey and Kurland 2002, Cooper and Kurland 2002, Gajendran and Harrison 2007, Golden and Veiga 2005, Staples et al. 1999, Wiesenfeld et al. 1999). However, changes in technology and organizational structures and practices offer rather varied options for where employees may work when they are not colocated with coworkers and supervisors in a central office (e.g., Hill et al. 1998). For example, employees may work from their homes, clients' offices, single- or multiorganization satellite centers, on the road, or any number of other locations (Feldman and Gainey 1997, Kurland and Bailey 1999). It is therefore important not only to consider the extent to which employees are *not* working in traditional offices but also to consider the attributes of the locations in which

they *do* work that may affect employees' experiences of respect.

Physical isolation is perhaps the main challenge facing virtual employees, and it implies reductions in the level of direct contact with work-related interaction partners as well as detachment from the organization itself—the embodiment of "out of sight, out of mind" (McCloskey and Igbaria 2003). Prior research is consistent with the notion that physical isolation could lead to professional and social isolation in virtual work contexts (e.g., Cooper and Kurland 2002, Gainey et al. 1999), but some work has found no empirical correlation between work mode and perceived professional isolation (Golden et al. 2008). Relatively neglected in previous work are the less relational and more behavioral features of employees' work modes—in effect, the level of physical isolation they experience as virtual employees. In the present research, we address this gap by focusing on variation in levels of physical isolation experienced by virtual employees and assessing how the degree of physical isolation relates to employee perceptions of respect and organizational identification.

Our investigation is relevant to a wide array of organizations where most employees work in office but some employees have the option of working virtually at least part-time, a very common arrangement in organizations today. Consider recent trends in telecommuting, for example. The U.S. Bureau of Labor Statistics estimates that the proportion of Americans that telecommute at least once per month increased from 8% in 2006 to 11% in 2008. Yet at the same time that the total number of telecommuters has risen, the percentage of telecommuters who work this way almost every day has fallen from 51% in 2006 to 40% in 2008 (WorldatWork 2009). This indicates that engaging in virtual work on an occasional basis may be on the rise in U.S. organizations. We therefore chose to focus on virtual work that occurs in organizations in which working in a central office is customary, using two field studies with organizations that use a variety of virtual work arrangements.

In developing our hypotheses, we incorporate interview data collected from 29 employees of a technology firm whose virtual work arrangements required that that the employees work in physically isolated settings much of the time. These employees were drawn from the same organization reported in our second field study, but they were not participants in that study. We conducted semistructured interviews that lasted 60–90 minutes, with one author serving as the primary interviewer and another transcribing the interviews verbatim. Our questions focused on how employees experience and make sense of engaging in virtual work in physically isolated settings, emphasizing the effects on their relationship with the organization. We use data from these interviews to inform our theory and hypotheses, as well as offer selected quotes below to illustrate particular points.

Physical Isolation and Perceived Respect

Employees' perceptions of their respect within the organization provide an important indicator of the quality of their relationship with the organization as a whole (Lind and Tyler 1988, Tyler et al. 1996, Tyler and Lind 1992). Employees' perceived respect is not based on their own evaluations of their value but is instead communicated by other organization members (De Cremer 2002). Specifically, research on respect advanced in the group-value model approach to justice issues (e.g., Smith and Tyler 1997, Tyler 1999, Tyler et al. 1996) emphasizes how employees evaluate their respect by judging whether they are treated in accordance with what they regard as the prototypical norms (e.g., values, customs, and behaviors) of the organization (Tyler and Blader 2002). Such norms represent the standards for what constitutes organizational membership or inclusion in the organization. Employees perceive that they are respected when their work experiences and interactions suggest that they are being treated in accordance with the standards that define the organization. In contrast, employees perceive that they are not respected when their supervisors or coworkers treat them in normatively inappropriate and noninclusive ways.

Social identity research has not yet considered how the physical arrangement of work might affect employees' perceptions of their respect within the organization. Critically, it is likely that physical isolation alters the work-related experiences and interactions that inform employees' perceptions of their respect within the organization. This idea is consistent with research on virtual work suggesting that less respect may be one of the burdens that employees working at a distance must bear (Kurland and Bailey 1999). Notably, anecdotal accounts reveal that physically isolated employees engaged in virtual work perceive that they are treated differently and believe that they are less valued in the workplace (Cooper and Kurland 2002, McCloskey and Igbaria 2003). Quotes from our interview data concur:

> There's a perception that people don't *work* from home so you have to prove yourself. In my previous position, my manager wrote to me every afternoon at 5 P.M., and I knew it was to check if I was still working. Why should someone who is a senior writer who has met every deadline have to do that? It is a lack of respect.

> Being the go-to person is the biggest sign of respect—you're just less likely to be that person when you're not around every day.

These physically isolated employees' experiences and interactions with others communicate a lack of respect, both by commission (e.g., close monitoring inconsistent with employees' position and prior performance) and by omission (e.g., failure to consult with them).

Why might more physically isolated employees be more likely to have experiences and interactions that communicate a lack of respect? We argue that greater physical isolation weakens the extent to which employees are viewed as prototypical organization members. Social identity researchers have argued that reactions to and feelings about fellow group members are driven by perceptions of how prototypical those individuals are—that is, how well they are believed to fit or uphold the descriptive and prescriptive norms of the group (Hogg et al. 1995, Hogg and Terry 2000). Such norms relate to attributes that characterize the organization, including personal qualities that describe actual members or the idealized notion of a member (values, attitudes, competencies, and the like) as well as activities, interactions, and behaviors that are central to being a member. In all organizations, members differ in the extent to which they are perceived to be representative or prototypical of the organization. Individuals who are viewed as more prototypical constitute "better" examples of an in-group member than those who are less prototypical because they affirm the features that connect individual members and bind them together as a group. Thus, more prototypical members tend to be more socially attractive within the group (i.e., are consensually liked) and granted higher respect by others. In contrast, because less prototypical members threaten the integrity of the group's norms, they tend to be socially marginalized and granted less respect by others (Jetten et al. 2002).

Perceptions of less respect among employees who are more physically isolated may stem, in part, from other organization members coming to view these employees as less prototypical. Critically, respect hinges both on the extent to which an employee is able to consistently act in prototypical ways and on the extent to which other members are able to observe such efforts, both of which are challenged when an employee is more physically isolated. In organizations where it is more typical for employees to work in traditional, centralized office settings, the ideal prototype is an employee who is fully available. Many of the coworkers, supervisors, and internal clients whose views determine an employees' standing may not themselves operate in settings that are highly physically isolated. Ironically, then, even when job and organizational demands require that employees be physically isolated (e.g., as the sole organizational representative at a client site or while traveling for work), the iconic organization man or woman (Whyte 1956) who is in the central office at least from 9 to 5 may set the standard for evaluation. Virtual employees' accounts are consistent with this, suggesting that physically isolated virtual employees confront organizational pressures for face time that are wholly unreasonable (Mason 1992).

Physically isolated settings may also make it difficult for employees to exhibit prototypical behavior simply because some behaviors are not applicable in isolated settings. For instance, in organizations where

informal decision-making processes are customary (e.g., occurring in hallway conversations or impromptu meetings), greater physical isolation disrupts participation in these normative activities. Furthermore, physically isolated settings may make it difficult for other organization members to observe the prototypical behaviors that virtual employees do exhibit. For example, competence is likely to be a prototypical attribute in many organizations, but it may be harder to demonstrate when one is physically isolated. It is often difficult for fellow organization members to observe how hard physically isolated employees work, how much they accomplish, how they go about their tasks, and their general demeanor on the job (Kurland and Bailey 1999). Consequently, they may form impressions of more physically isolated employees based on incomplete or poor information, diminishing the extent to which they view these employees as meeting the organization's standards for prototypicality. For example, our interviewees reported,

> If I were in the office and they could see I was around, I wouldn't worry.... I feel like I need to prove myself even more. I need to build confidence that others have in me...but if you're not in front of somebody's face, they can't see that you're a great performer.

> There are insiders and outsiders, and you don't want to be thought of as an outsider. It's easier to get attention if you're physically there, and it's very easy to overlook someone doing good work if all you get is an e-mail from them every two days.

These quotes illustrate virtual employees' perception that their physical isolation diminishes other members' perceptions of the extent to which they fit ideal prototypes regarding competence and insider status. When organization members view virtual employees as less prototypical, their words and actions may send signals suggesting that they are not respected. Whereas the group-value model has focused on treatment by authority figures, employees base their perceptions of their respect within the organization on experiences with colleagues at lower hierarchical levels as well, including those they work with, those they support and serve, and those they supervise (Branscombe et al. 2002, De Cremer 2002, Simon and Stürmer 2003).

In sum, we argue that greater degrees of physical isolation will be associated with lower perceived respect within the organization. Interacting with members in prototypical ways is essential to one's acceptance in the organization and one's value as a member. Respect rests both on the extent to which an employee is able to consistently act in prototypical ways and on the extent to which other members are able to observe such efforts; greater physical isolation poses a challenge on both fronts. As a result, the experiences and interactions of more physically isolated employees are likely to contribute to perceptions of less respect.

HYPOTHESIS 1. *Greater degrees of physical isolation will be associated with less perceived respect.*

Organizational Identification Effects of Perceived Respect for Physically Isolated Employees

To the extent that physical isolation jeopardizes virtual employees' perceived respect, higher levels of physical isolation may interfere with their perception that they belong in the organization—specifically, their organizational identification. Organizational identification is a perception of belonging such that an individual's organizational membership becomes an important part of his or her self-definition (Ashforth and Mael 1989, Pratt 1998). Organizational identification plays a critical role in virtual work contexts. Strong organizational identification is a key motivational resource that keeps employees' interests aligned with those of the organization when traditional means of promoting desirable work behaviors, such as direct supervision, are lacking (Thatcher and Zhu 2006, Wiesenfeld et al. 2001). The self-concepts of employees who identify with the organization are intertwined with the organization's successes and failures (Pratt 1998), prompting actions that contribute to the organization's collective welfare, such as greater cooperation (Dukerich et al. 2002, Kramer 1991, Tyler 1999), increased effort on the job (Bartel 2001), and superior work performance (Blader and Tyler 2009, van Knippenberg 2000).

We argue that because of the lower levels of perceived respect that physically isolated employees experience, greater physical isolation will be associated with lower organizational identification. One physically isolated employee explained,

> In the early stages I was packing my boxes, which is no big deal; people are always swapping offices and moving around. The first question I got from other people was, "Where are you moving to?" When I said, "Home," they gave me quizzical looks. Some regarded it as blatant stupidity. I feel that the psychology of my relationship with [the company] has changed dramatically as a result. Within days I felt less like an employee and much more like a consultant. When senior people call a meeting, usually you ask that they come to your office. When I was working [in the building], they always came to my office. Now, I have to go to *their* office, just like the consultants do. That part of my work style or pattern has gone away. Coming into the office, seeing the same people, having conversations in the halls—it tied me to that community. I don't have it now; it creates distance. This was a revelation to me; I had never thought about it before. It feels like I'm consulting to [the company] more than it feels like I'm an employee.

This quote demonstrates how becoming more physically isolated leads to social interactions signaling low respect both directly (e.g., "Some regarded it as blatant stupidity") and indirectly (e.g., "Now, I have to go to *their* office"), and this perceived loss of respect alters

employees' relationship with the organization by making it weaker and more tenuous (e.g., feeling like a temporary consultant).

Respect is particularly relevant to organizational identification because it focuses on the relationship between an employee and the organization. Research has shown that less perceived respect is associated with weaker identification (Simon and Stürmer 2003, Tyler and Blader 2002). Specifically, respect provides information about two identity concerns that influence how strongly one identifies with the organization: whether one belongs (i.e., inclusion) and whether one is evaluated positively by group members (i.e., social reputation) (De Cremer and Tyler 2005).

Employees whose perceived respect is lower because they are more physically isolated are more likely to feel that they are peripheral or marginal members of the organization. Thus, less respect reduces identification because the lack of inclusion frustrates a key basis of identification: the feeling of belongingness (see Baumeister and Leary 1995). Organizational memberships that fail to sufficiently meet individuals' need to belong tend to be less desirable targets for the individuals' identification (Pratt 1998). This is consistent with prior research suggesting that physically isolated employees such as home-based telecommuters often feel detached from or less connected to the organization (McCloskey and Igbaria 2003).

Less respect also implies that employees have less positive social reputations (that is, they are not evaluated positively by group members). Greater physical isolation is therefore likely to reduce the self-enhancement motivation to identify with the organization because the lack of respect isolation engenders deprives employees of the expectation that identifying with the organization will be self-enhancing (Ellemers et al. 2004; Tyler 1999; Tyler and Blader 2000, 2002). This idea is consistent with research suggesting that people are less likely to strongly identify with their work organizations when their membership does not sufficiently affirm their self-esteem (Dutton et al. 1994, Pratt 1998; also see Tajfel and Turner 1986). We therefore hypothesize the following.

HYPOTHESIS 2. *Perceived respect will mediate a negative relationship between physical isolation and organizational identification.*

We tested our hypotheses in two field studies of organizations in which employees work in various settings (e.g., in the central office, from home, at satellite work centers, on the road, and in ad hoc environments) that involve different degrees of physical isolation.

Study 1
We tested our hypotheses with survey data collected from recent hires in the consulting services division of a large technology firm headquartered in the eastern United States. There was little variation in the length of consultants' tenure because all were recent university graduates who had begun their employment around the same time. This sample enabled us to assess the relationships among physical isolation, perceived respect, and organizational identification with recently hired employees whose social reputation and organizational identification are likely to have been developing at the time of the study.

Respondents
We administered a Web-based survey to all employees who were hired during the previous 12 months and who participated in the organization's formal virtual work program ($N = 434$), and we received 374 responses (86% response rate). Overall, respondents (61% male, 39% female) had been employed for eight or nine months (average tenure, 8.41 months) at the time of the survey and were recent university graduates with either undergraduate (39%) or graduate (61%) degrees. Data on respondents' race and age were unavailable. Respondents represented various areas of specialization, including financial services, programming, e-business integration, and communications, and they were formally assigned to one of two central offices located in the same state. Respondents worked in one of two departments, business consulting (31%) or information technology consulting (69%), in their respective office locations.

According to our interviews with managers and employees in the organization, organizational norms dictate that employees be present in the central office. At the same time, in the consulting services division, employees' project assignments require that they spend time both in the central office as well as away from the office, working on the road, at clients' offices, and in other settings that vary with respect to physical isolation from organization members. Employees' work arrangements are not a matter of choice but rather are determined by the organization, taking into account the specific needs of client projects. The nonvoluntary nature of employees' work arrangements suggests that employees cannot seek out more or less isolated work settings in response to their sense of perceived respect or organizational identification.

Measures
Degree of Physical Isolation. Whereas most research on virtual work focuses on whether, or the extent to which, employees work away from a central office or their supervisors (e.g., DuBrin 1991, Golden et al. 2008, Wiesenfeld et al. 1999), the degree of physical isolation that employees experience has not been examined explicitly. We operationalized the degree of physical isolation as the extent to which employees spend time

working in settings away from central offices and in other locations in which other organization members are physically present, such as at home, in a hotel or airport, at a coffee shop, or in offices that are not shared with fellow organization members. Thus, working onsite at a client organization with fellow colleagues or in a satellite work center where other organization members are present would *not* be examples of physically isolated settings. We created a degree of physical isolation variable that captured the percentage of time that employees typically spend in such settings, ranging from no time spent in isolated settings (0%) to all of one's work time spent in isolated settings (100%). Specifically, we asked respondents, "On average, what percent of your total work time do you work in a physically isolated setting away from the organization, your supervisor and coworkers, and other members of the organization?" We asked respondents to report their degree of isolation because supervisors did not systematically monitor the amount of time employees spent in isolated locations. Thus, respondents were the most accurate source of information for this variable.[3] Higher scores on this measure indicate a higher degree of physical isolation. On average, respondents reported spending 29% of their work time in physically isolated settings (S.D. $= 32.68\%$, range, 0%–100%).

Perceived Respect. We measured perceived respect with three items that assessed the extent to which respondents perceive that they are included and valued as members of the organization. Tyler and his colleagues have compiled a broad set of items to measure perceived respect (e.g., see Smith and Tyler 1997, Tyler and Blader 2002, Tyler et al. 1996). Specific items are customized to the context (e.g., universities, national affiliation, families, and work organizations) because respect is context-specific. What these items have in common is that they are designed to measure people's perceptions of where they stand in the group based on their interactions with, and the feedback they get from, others. That is, the items capture whether they are included by others and what they think their social reputation is, rather than whether they personally see themselves as worthy of respect. Items differ across contexts because characteristics that are likely to be relevant to evaluating respect within a group may vary. Accordingly, to assess perceived respect within the organization, we conducted informal interviews with two supervisors at the organization to identify locally relevant dimensions and then adapted three items from Tyler and Blader's (2002; Studies 2 and 3) autonomous respect scale, which focused specifically on respect in work organizations. Respondents indicated on a 7-point Likert-type scale the extent to which they agreed that members of their organization value their skills and abilities, value their ideas and efforts, and react well to them and make them feel included (Cronbach's $\alpha = 0.88$).

Organizational Identification. We assessed identification with a one-item measure developed by Bergami and Bagozzi (2000). This measure is a visual report in the form of a Venn diagram that asks respondents to directly express their felt degree of overlap between their own identity and the organization's identity by indicating the pair of circles that best represents the relationship between their identity and the organization's identity from no overlap at all (1) to complete overlap (8), with higher scores indicating stronger identification. Bergami and Bagozzi (2000) showed that an individual's response to this visual item achieved satisfactory levels of predictive validity and generalizability, as well as convergent validity with a leading measure of identification (i.e., Mael and Ashforth 1992). Since its development, this visual measure has been used in other studies of organizational identification (e.g., Bartel 2001, Dukerich et al. 2002, Rockmann et al. 2007).[4] Using this one-item visual report allowed us to reduce the potential for common method bias by methodologically separating our measures of respect and identification and having respondents use different response formats (e.g., Likert-type scale and Venn diagrams) (see Podsakoff et al. 2003).

Controls. Project assignments comprise the central tasks and activities of consultants. We therefore asked employees to indicate the number of billable client projects to which they had been formally assigned since joining the organization. We also asked respondents to report their central office location (eastern or western regions of the United States) and department affiliation (business consulting or information technology consulting) to control for any influence such assignments may have on respect. We also asked respondents to report their gender and tenure because prior research has associated gender and tenure with status and/or organizational identification (e.g., Ridgeway 1991, Mael and Ashforth 1992).

Open-Ended Question. We concluded the survey with an open-ended question that invited employees to reflect on how being physically isolated from the organization and other members has affected them. We included this question for the specific purpose of exploring how employees experienced and made sense of their physical isolation. Importantly, our hypotheses about the effect of physical isolation on identification assume that prototypical patterns of participation are altered in ways that undermine the respect they receive within the organization.

Results

Tests of Hypotheses. Table 1 presents the regression analyses that test our hypotheses. Before conducting the regression analyses, we inspected each of the variable

Table 1   Regression Analyses for Study 1

	Equation (1)	Equation (2)	Equation (3)	Equation (4)	Equation (5)
Dependent variable:	*Perceived respect*	*Perceived respect (Hypothesis 1)*	*Organizational identification*	*Organizational identification*	*Organizational identification (Hypothesis 2)*
Independent variables:					
Gender (0 = female, 1 = male)	0.08 (0.10)	0.07 (0.19)	0.07 (0.10)	0.05 (0.10)	0.03 (0.09)
Organizational tenure (months)	0.03 (0.03)	0.03 (0.04)	0.15* (0.04)	0.15* (0.03)	0.14* (0.04)
Central office (0 = west, 1 = east)	−0.06 (0.13)	−0.06 (0.13)	−0.02 (0.16)	−0.03 (0.16)	−0.01 (0.16)
Department (0 = IT, 1 = business)	0.11 (0.16)	0.08 (0.16)	−0.05 (0.19)	−0.03 (0.19)	−0.06 (0.18)
Number of billable projects assigned	0.06 (0.04)	0.07 (0.04)	0.03 (0.04)	0.05 (0.04)	0.03 (0.04)
Degree of physical isolation		−0.24** (0.01)		−0.21** (0.02)	−0.10 (0.01)
Perceived respect					0.40** (0.06)
Adjusted R^2	0.01	0.07	0.02	0.06	0.21
F	1.19	5.06**	2.10	4.80**	15.42**

Notes. Values listed are standardized beta coefficients; standard errors are in parentheses. IT = information technology.
  *$p < 0.01$; **$p < 0.001$.

distributions for normality. All variables were normally distributed with the exception of the degree of physical isolation, which exhibited a longer right tail (skewness = 1.01, S.E. = 0.13).[5]

We first assessed the effect of the degree of physical isolation on perceived respect. As predicted in Hypothesis 1, physical isolation had a significant negative effect on perceived respect in the organization (Equation (2); $\beta = -0.24$, $p < 0.001$), even after entering our controls.

We tested Hypothesis 2 using the three-stage mediated regression approach recommended by Baron and Kenny (1986). We first regressed organizational identification on respondents' level of physical isolation and found that the degree of physical isolation had a significant negative influence on organizational identification (Equation (4); $\beta = -0.21$, $p < 0.001$). The second step involved verifying the significant relationship between the degree of physical isolation and perceived respect, which we reported previously. The final step involved assessing the mediating effect of respect on the relationship between physical isolation and identification. As shown in Equation (5) of Table 1, the effect of physical isolation on organizational identification diminished to nonsignificance ($\beta = -0.10$, $p > 0.05$) when entered simultaneously with perceived respect. Sobel ($z = -3.58$, $p < 0.001$) and Goodman tests ($z = -3.61$, $p < 0.001$) provided additional evidence that perceived respect carried the influence of physical isolation on organizational identification, consistent with Hypothesis 2.

Given that our data are cross-sectional, we used two types of additional analyses to obtain greater confidence that the observed relationships between variables follow the hypothesized pattern. First, we evaluated the possibility that organizational identification could be responsible for the effects of physical isolation on perceived respect and found no support for this alternative. The results indicate that the effect of physical isolation on respect remained a significant predictor ($\beta = -0.18$,

$p < 0.001$) when entered simultaneously with organizational identification. Second, we evaluated the possibility that the degree of physical isolation mediates the relationship between perceived respect and organizational identification and again failed to support this alternative pattern. The effect of perceived respect on identification remained significant, and its predictive value was undiminished when physical isolation was included in the equation ($\beta = 0.40$, $p < 0.001$) and when it was not ($\beta = 0.42$, $p < 0.001$). This suggests that physical isolation was mediated by respect (Hypothesis 2), but respect is not mediated by physical isolation nor is the pattern consistent with mere intercorrelation, which would have reduced the predictive value of both physical isolation and perceived respect when they are included simultaneously.

Qualitative Content Analysis. Responses to the open-ended survey question ($N = 162$, 43% response rate) provide a further window into how employees experienced and made sense of their physical isolation. Specifically, these data allowed us to consider whether physical isolation disrupted or altered respondents' involvement with the organization in ways that undermined the respect they received within the organization. One of the authors and a research assistant blind to the study's hypotheses performed content analysis following Miles and Huberman's (1994) recommended procedures and the general guidelines offered by Golden-Biddle and Locke (1997). An initial coding of the data sought to establish dominant themes. Both researchers then compared notes, discussed each theme's prominence, assessed differences, and reached an agreement on a set of categories that captured the different ways in which being physically isolated affected respondents. Both researchers independently coded the data using this category scheme and then resolved uncertainties around uncategorized responses through discussion.

Respondents' evaluative statements of how physical isolation affected them corresponded to two general categories: positive (16% of the responses) and negative (84% of the responses). Respondents mentioned, on average, 0.28 positive effects (S.D. = 0.48) and 1.03 negative effects (S.D. = 0.79) related to their physical isolation at work, with 33 respondents offering only positive effects, 119 offering only negative effects, and 10 offering both positive and negative effects. Within the positive category, responses comprised two distinct subcategories: *enhanced autonomy and responsibility* (11% of the responses) and *professional networking via electronic media* (5% of the responses).

The negative category, which was much more prevalent, comprised three subcategories. One subcategory reflected *respect* (24% of the responses), with responses corresponding precisely to the two identity concerns that respect informs—inclusion ("feeling isolated," "not really viewed as part of the practice," "feel lost in the crowd," "feel separated from my colleagues and business unit") and social reputation ("not seen as credible," "not getting respect," "feeling undervalued," "not taken seriously"). These responses enrich our survey measure of perceived respect by illustrating, in respondents' own words, how their experiences and interactions with others communicated that they were not held in high regard in the organization. Two additional subcategories were *less involvement in projects and decisions* (44% of the responses) ("not involved in the 'real' work of this company," "not a part of key decisions") and *disrupted communication* (16% of the responses) ("hard to keep abreast of policy changes and resource actions," "responses are not timely"). These responses help provide a window into why physical isolation poses a challenge to perceiving earned respect. Specifically, physical isolation appears to disrupt or complicate respondents' inclusion in activities associated with being full-fledged and valued members of the organization. Overall, these data are consistent with our arguments that physical isolation is negatively associated with respondents' perceptions of respect.

Discussion

Overall, the results of Study 1 provided evidence that higher degrees of physical isolation were negatively associated with respondents' perceived respect and, in turn, their organizational identification. The more isolated respondents were from the organization and other members, the less likely they were to report that others viewed them as respected members. Our qualitative data provided vivid illustrations of the negative implications of physical isolation for respondents' perceived respect. Perceived respect, in turn, was responsible for the effect of physical isolation on organizational identification.

Study 2

Study 1 provided suggestive evidence that greater physical isolation negatively affects organizational identification because isolation negatively influences perceived respect, at least during the early, formative stage when new employees initially establish their social reputations and psychological relationship with the organization. Study 1 respondents were all recent hires with relatively short tenure in the organization. Physical isolation apparently makes it difficult for recent hires to *develop* perceptions of respect and strong organizational identification, but whether it also becomes an obstacle among longer-tenured employees requires replication of our Study 1 results among respondents who have had more time to establish their reputation and relationship with the organization. To address this issue of generalizability, we conducted a second field study in a different organization in which we had access to employees with varying levels of tenure.

Respondents

We tested our hypotheses at a large technology firm located in the western United States that produces an array of software, systems, services, and microelectronics. The sample of employees in Study 2 was similar to our Study 1 sample in three respects. First, the sample of employees in Study 2 formally participate in their organization's alternative work program and regularly spend time away from their central office, working at home, on the road, at clients' offices, and at regional shared and exclusive satellite work centers that provide them with a short-term physical workspace and access to technological resources. Thus, employees work in a variety of locales, and there is variance in the degree of physical isolation that any given work arrangement involves. Second, consistent with our Study 1 sample, the degree of physical isolation experienced by our Study 2 sample is not a matter of choice. Their work arrangements are determined by the specific needs of their tasks, jobs, and the organization rather than employees themselves. For example, the organization had recently closed some offices to save on real estate costs. These office closings required more than 31% of the employees in our sample to work from home or in satellite work centers on either a full- or part-time basis because office space was not available for them. The nonvoluntary nature of employees' work arrangements suggests that employees could not seek out more or less isolated work settings based on their sense of perceived respect or organizational identification. Third, the broader organizational norms were similar to those of Study 1. Specifically, our interviews and conversations with managers and employees indicate that most employees in the organization worked in traditional centralized offices and that employees' physical presence in the office is typical and expected.

However, there were also some differences between the samples. Employees in Study 2 had varying levels of tenure, whereas those in Study 1 were recent hires. Also, although our sample in Study 1 served external clients, many of the employees in Study 2 work in staff roles in which the "client" they serve is another employee, department, or division of their own organization.

Employees were recruited via an e-mail message sent from the human resources department two weeks before the study began. The e-mail was sent to approximately 250 operations or sales and services employees who were affiliated with one of two regional offices located within the same state. Overall, 146 employees (93 men, 43 women, and 10 unidentified) participated in the study (58% response rate). Our sample was representative with regard to the gender composition of the departments from which employees were recruited as well as the broader employee population (i.e., women comprise 35% of the total employee population and 30% of our sample). Data on respondents' race and age were unavailable. Respondents were employed at the organization for an average of 6.73 years (range, 1 month to 17 years; S.D. = 4.50 years) and held both managerial ($N = 50$) and nonmanagerial ($N = 96$) positions. Tenure and managerial status information for the full population was unavailable, preventing us from assessing nonresponse bias on these dimensions.

Survey Measures

Degree of Physical Isolation. We measured the percentage of work time employees spent in physically isolated settings with the same item used in Study 1. On average, respondents reported spending 38% of their work time in physically isolated settings (S.D. = 33.82%; range, 0%–100%). Half of all respondents spent 30% or less of their time in such settings, with 15% of the respondents spending no time in an isolated setting.

Perceived Respect. We assessed perceived respect with four items adapted from Tyler and Blader's autonomous respect scale (2002, Studies 2 and 3), which seemed most relevant to the organization based on the 29 interviews described earlier and the feedback of an additional informant from the human resources department. Respondents indicated on a 7-point Likert-type scale the extent to which they agreed that people at their organization value their ideas and efforts, respect the work they do, value them as a member of the organization, and react well to them and make them feel included (Cronbach's $\alpha = 0.90$).

Organizational Identification. We assessed organizational identification with the six-item scale developed by Mael and Ashforth (1992) (Cronbach's $\alpha = 0.91$). A sample item includes "When someone criticizes (name of organization), it feels like a personal insult." Respondents used a 7-point Likert-type response scale, with higher scores indicating stronger identification.

Controls. Given the influence of organizational tenure on identification (Mael and Ashforth 1992), we asked employees to indicate the length of time that they were employed with the organization and the length of time they had been working virtually. We also asked employees to indicate their gender, managerial status (manager/nonmanager), central office location (northern or southern regions of the state), and department affiliation (operations or sales and services) because of the potential effects of these attributes on respect.

Results

We conducted a confirmatory factor analysis to evaluate whether our measured constructs are valid and reliable. A two-factor model was fit to the data, and the results suggest that responses to the respect and identification items represented separate judgments. In particular, the standardized root mean square of the residuals was 0.07, and the comparative fit index was 0.91. The fit of the two-factor model was also compared with an alternative one-factor model. This model did not demonstrate as good a fit to the data as the two-factor model ($\chi^2 = 81.28$ for the two-factor model compared with $\chi^2 = 272.54$ for the one-factor model; $\Delta\chi^2 = 191.32$, $p < 0.001$). The standardized root mean square of the residuals was 0.17, and the comparative fit index was 0.56. Thus, these results support the reliability and validity of our respect and identification measures.

Before testing our hypotheses, we inspected each of the variable distributions for normality. All variables were normally distributed with the exception of degree of physical isolation, which was marginally skewed to the left (skewness = 0.45, S.E. = 0.20).[6]

Table 2 presents the regression analyses testing our hypotheses. We regressed perceived respect on employees' reported degree of physical isolation. After entering our control variables (Equation (1)), the degree of physical isolation had a significant negative influence on perceived respect (Equation (2); $\beta = -0.37$, $p < 0.001$), consistent with Hypothesis 1.

We tested Hypothesis 2 using the three-stage mediated regression approach recommended by Baron and Kenny (1986). We first determined that organizational identification was negatively associated with the degree of physical isolation (Equation (4); $\beta = -0.29$, $p < 0.001$). Second, we confirmed the significant relationship between physical isolation and perceived respect reported previously. The final step involved assessing the mediating effect of perceived respect on the relationship between isolation and identification. As shown in Equation (5) of Table 2, the effect of the degree of physical isolation on organizational identification diminished to nonsignificance when entered simultaneously with perceived respect ($\beta = -0.14$, $p > 0.05$). Sobel ($z = -3.45$, $p < 0.001$) and Goodman tests ($z = -3.49$, $p < 0.001$) provided additional evidence that perceived

Table 2   Regression Analyses for Study 2

	Equation (1)		Equation (2)		Equation (3)		Equation (4)		Equation (5)	
Dependent variable:	*Perceived respect*		*Perceived respect (Hypothesis 1)*		*Organizational identification*		*Organizational identification*		*Organizational identification (Hypothesis 2)*	
Independent variables:										
Gender (0 = female, 1 = male)	−0.09	(0.17)	−0.05	(0.16)	−0.09	(0.18)	−0.06	(0.17)	−0.03	(0.17)
Organizational tenure (years)	0.12	(0.02)	0.19*	(0.02)	0.18*	(0.02)	0.23**	(0.02)	0.17*	(0.02)
Tenure in telecommuting arrangement (years)	0.14	(0.02)	0.05	(0.02)	0.08	(0.03)	0.01	(0.03)	0.01	(0.03)
Rank (0 = nonmanager, 1 = manager)	0.01	(0.17)	0.01	(0.16)	−0.04	(0.19)	−0.05	(0.17)	−0.05	(0.17)
Central office (0 = south, 1 = north)	−0.12	(0.18)	−0.12	(0.16)	−0.30***	(0.19)	−0.30***	(0.18)	−0.25**	(0.17)
Department (0 = operations, 1 = sales/services)	−0.19*	(0.20)	−0.12	(0.19)	−0.05	(0.22)	0.01	(0.20)	0.06	(0.20)
Degree of physical isolation			−0.37***	(0.01)			−0.29***	(0.01)	−0.14	(0.01)
Perceived respect									0.39***	(0.09)
Adjusted R^2	0.06		0.18		0.09		0.17		0.28	
F	2.76**		5.56***		3.27**		4.91***		7.90***	

Note. Values listed are standardized beta coefficients; standard errors are in parentheses.

$*p < 0.05$; $**p < 0.01$; $***p < 0.001$.

respect absorbed the predictive value of the degree of physical isolation on organizational identification, consistent with Hypothesis 2.

Given that our data are cross-sectional, we conducted two additional tests to support the causal direction implied by our hypotheses. First, we assessed the alternative possibility that organizational identification could mediate the relationship between isolation and perceived respect. The results indicate that the effect of isolation on perceived respect remained a significant predictor ($\beta = -0.27$, $p < 0.001$) when entered simultaneously with organizational identification, providing suggestive evidence that respect is responsible for the relationship between physical isolation and organizational identification, and not the reverse. Another issue concerns the possibility that the degree of physical isolation mediated the relationship between perceived respect and organizational identification. We found that controlling for physical isolation did not reduce the predictive value of perceived respect in relation to organizational identification. The effect of perceived respect remained significant when physical isolation was included in the equation ($\beta = 0.39$, $p < 0.001$) and when it was not ($\beta = 0.42$, $p < 0.001$). These results are consistent with our theory and hypothesis that perceived respect is responsible for the effects of physical isolation on organizational identification rather than the reverse (or mere intercorrelation).

Discussion

The results of Study 2 provided additional evidence that physical isolation was negatively associated with respondents' perceived respect in the organization and their organizational identification. We also found that perceived respect explained the effect of the degree of physical isolation on organizational identification in a sample of employees with varying levels of tenure.

To further probe whether the negative effect of physical isolation on organizational identification, mediated by perceived respect, operates in the same manner for shorter- and longer-tenured employees, we conducted post hoc analyses to assess whether organizational tenure moderated the effect of physical isolation on perceived respect and organizational identification.[7] The interaction of physical isolation and organizational tenure was not a significant predictor of either perceived respect or organizational identification. Our results suggest that the degree of physical isolation may not only make it difficult to develop a sense of organizational identification (Study 1) but may also affect the ability of longer-tenured employees to create and maintain strong levels of identification (Study 2) because of how physical isolation influences their perceived respect. Thus, an implication of our results is that longer organizational tenure does not buffer employees from the negative effect of physical isolation. Rather, it is likely that physical isolation disrupts or alters participation in the prototypical activities, interactions, and behaviors that underlie the respect one receives, regardless of how long one has been employed by the organization.[8]

General Discussion

Overall, our focus on the relationships between physical isolation, perceived respect, and organizational identification highlight important costs of working in physically isolated settings. Specifically, we find that a greater degree of physical isolation is associated with lower perceived respect as well as lower organizational identification. Furthermore, our data suggest that perceived respect may be an important factor in explaining the effect of physical isolation on organizational identification. We tested our hypotheses empirically with two independent samples in different organizational settings

with different employee populations; we used different measures of organizational identification and yet found highly consistent results. Our findings have important implications for research on virtual work, respect, and organizational identification.

Implications for Theory and Directions for Future Research

Status and respect have been understudied in research on virtual work despite anecdotal accounts suggesting both that virtual employees fear that their work arrangements affect their credibility and standing within the organization and that such concerns limit participation in virtual work (Blake 2010, Cooper and Kurland 2002, Nilles 1994). We find that physical isolation is negatively associated with perceived respect, even among employees whose work is client-focused and who thus may be expected to work outside centralized offices frequently, such as the consultants in Study 1. These findings suggest that virtual employees who commonly work in boundary-spanning divisions nested within larger organizations where most employees are not virtual face a predicament: they must choose between work arrangements that fulfill the prototype of the average in-office organization member, thus garnering respect within the organization, and those that fulfill subgroup prototypes, such as working virtually to serve the needs of their clients. The employees in our studies appeared to suffer the negative consequences of being assessed and assessing themselves in relation to the iconic organization man or woman whose terrain is the centralized office (Whyte 1956) instead of in relation to more proximal referents (e.g., fellow consultants) for whom physical isolation is more prototypical and thus more conducive to respect and identification.

There is irony in the implication that modern virtual employees whose work dictates that they operate outside of a centralized office are still evaluated in relation to a prototype emphasizing presence and availability in the office. Individuals are typically motivated to compare themselves to prototypes that are self-enhancing (Hogg and Terry 2000) rather than those that are self-threatening. The salience of a prototype so difficult to fulfill suggests that employees may not be free to choose the prototype to which they compare themselves; that is, prototypes may reflect social rather than perceptual processes. Our findings highlight the need to better understand the social negotiation processes employees and their fellow organization members use to develop and enforce group prototypes, which may in turn shape employees' perceived respect and identification.

Future research may fruitfully explore whether our findings in two samples of virtual employees may extend to other employees in physically isolating roles, such as field or international assignments, boundary-spanning roles, and other types of client services work.

With changes in technology and organizational structure, physical isolation is becoming increasingly prevalent, creating a growing need for research on employees suffering its negative consequences. In addition, it is worthwhile to consider whether the linear relationship between physical isolation and respect that emerged in our studies of virtual employees is replicated in other contexts. For example, it is possible that in organizational settings where physical isolation is more typical or where certain types of boundary-spanning employees are employed, the relationship between physical isolation and respect may be curvilinear, such that moderate levels of physical isolation warrant the highest levels of respect.[9]

Physically isolated employees may be less likely to be viewed as prototypical in the organization, and therefore they may come to be viewed by themselves or others as marginal members. Indeed, group members who are less prototypical are more self-aware about the state of their inclusion or acceptance in the group and more likely to feel marginal and insecure compared with more prototypical members (Baumeister and Leary 1995, Kramer 1998, Moreland 1985). They also may interpret lower respect as a signal that they risk losing their in-group status entirely, such as through involuntary job loss (Blake 2010). Future research may explore the impact of physical isolation and employees' perceptions of their respect within the organization on outcomes such as maintaining (or losing) in-group membership.

Our focus on physical isolation contributes to work on intragroup status and perceived respect because our studies are the first to draw attention to how the physical arrangement of work is an important correlate of perceived respect. Perceptions of status and respect are rarely considered in their physical and relational context in existing research. Our findings suggest the importance of attending to the ways in which the context of work may facilitate or interrupt employees' ability to consistently act in prototypical ways and have others observe these efforts, thus establishing or enhancing status and respect.

Accounting for the degree of physical isolation may help reconcile opposing views in prior research in which virtual work has been found to sometimes (but not always) weaken organizational identification. The degree to which different virtual work contexts physically isolate employees and the implications of that isolation for perceived respect may partly explain when and why virtual employees have weaker identification. Furthermore, as technological innovation enables new types of physical work arrangements, future research may explore the implications of physical isolation beyond diminished respect and identification, such as the various ways that physical isolation could affect employees' attitudes toward their work and colleagues, group dynamics, and the impact of isolation on employees' long-term career outcomes.

Limitations and Boundary Conditions

Our studies have several limitations. Key issues are the cross-sectional, single-source nature of our study designs, which do not allow us to definitively establish causality and could raise the possibility of common methods bias. For example, reciprocal effects among physical isolation, perceived respect, and organizational identification can occur over time, which can only be studied using longitudinal research designs. We took steps to reduce common methods bias by following the advice of Podsakoff et al. (2003), such as using different response formats to separate the predictor and criterion variables and reminding respondents that their responses were completely anonymous. Also, it is worth noting that common methods bias is unlikely to fully explain our key mediation finding. That is, if the relationship between isolation and identification in both studies was simply an artifact of common methods bias, it would not be obvious why the relationship between the two disappeared when respect was statistically controlled or why our follow-up analyses supported the form and direction of the mediation pattern that we hypothesized rather than mere intercorrelation effects associated with common methods. The fact that identical results emerged across two independent samples further supports the generalizability of our findings. Nevertheless, future research utilizing longitudinal or experimental designs is needed to provide greater confidence that the relationships we found are, in fact, causal.

There are two important boundary conditions for our findings. First, the impact of physical isolation on employees' perceived respect and organizational identification is likely to depend on whether being physically present in a centralized office is prototypical in the organization as it was in our two research sites. Although the employees in the remote work programs in the organizations we studied use a range of work arrangements (e.g., central office, home office, coffee shops, airports, hotels, satellite work centers, and clients' offices), working in the central office is most conventional in these organizations, and virtual work is considered a legitimate alternative when one's work demands it. Our findings may be broadly generalized to a wide variety of organizations utilizing similar arrangements, but they may be less likely to apply to organizations where most employees work virtually, and the organizational prototype is not associated with a presence in centralized offices. Also, whereas our focus was on physical isolation resulting from any number of virtual work arrangements, future research should further explore whether the relationships we demonstrate are contingent on the type of physical isolation (e.g., being alone at home versus collocated with a client) that employees experience.

Our findings generalize less well to situations in which employees' level of physical isolation is voluntary, because the employees in the organizations we studied had little choice in their degree of physical isolation from their organizations. Whereas this is a strength of our study design because it suggests that employees were not in a position to seek out more or less isolated work settings based on their sense of perceived respect or organizational identification, in organizations affording their employees greater choice in where (and when) they work, employees' perceived respect and organizational identification may inform their choice of work arrangement. Specifically, we would expect a feedback loop to emerge, in which employees perceiving lower levels of respect and having weaker organizational identification may be more likely to withdraw from the organization by working in more physically isolated settings. Moreover, when virtual employees voluntarily choose their level of physical isolation, fellow organization members may be more likely to infer that high isolation is evidence of a lack of commitment on the virtual employees' part, further undermining respect. Future research could measure or manipulate the degree to which physical isolation is a matter of choice in order to more fully investigate these dynamics.

Practical Implications

Theoretically and practically speaking, our findings have implications for managing virtual work initiatives. For example, one question facing managers is *who* should be eligible to work virtually. Prior research is uniformly pessimistic about the impact of virtual work on those with short tenure (e.g., Davenport and Pearlson 1998, Nilles 1994). However, existing research offers neither a well-developed theoretical rationale nor an empirical demonstration of the negative effects of virtual work on recent hires. Our findings address these gaps in the literature by providing evidence that greater physical isolation undermines recent hires' organizational identification and that perceived respect can account for this negative effect. More importantly, physical isolation appears to be negatively associated with the extent to which any employee, regardless of tenure, is able to garner perceived respect within the organization. This suggests that the risks of physical isolation cannot be managed solely through selection mechanisms intended to identify suitable virtual work candidates.

Our focus on the relationships between the degree of physical isolation, perceived respect, and organizational identification also has implications for the structure of virtual work opportunities. Notably, if we had focused only on the association between physical isolation and identification, then the implication for organizations might be to structure virtual work opportunities that minimize physical isolation. By considering the mediating role of respect, we can understand *why* virtual work contexts involving greater physical isolation may be associated with weaker identification, suggesting that managers may not only direct their efforts

toward restructuring virtual work arrangements to mini-mize physical isolation but also consider how physically isolated employees can be given opportunities to interact with others in prototypical ways and to have experiences that affirm their status as valued members.

Conclusion

In conclusion, this study provides strong support that the amount of time employees spend working in phys-ically isolated contexts has implications for both their perceived respect and their organizational identification. Most importantly, perceived respect appears to be a crit-ical mechanism that explains why physical isolation has a potent effect on identification. To be sure, organiza-tions are continuing to experiment with modifications to the traditional physical context of work as a means of promoting organizational flexibility and efficiency, and this often requires work arrangements involving a high degree of physical isolation. The long-term viability of organizations that use such work arrangements may depend on developing strategies that enable employees to maintain strong social and psychological ties to the organization.

Endnotes
[1] In this paper we use the term "virtual work" to refer to a mode of work in which employees perform their core job responsi-bilities outside of traditional centralized office spaces at least part-time.
[2] Respect (Branscombe et al. 2002, De Cremer 2002, Simon and Stürmer 2003, Tyler et al. 1996) has also been referred to as standing (Tyler 1989, 1994), autonomous status (Tyler and Blader 2002), and social reputation (Emler and Hopkins 1990) by social identity researchers.
[3] Supervisors have a large number of stimuli to attend to—they have many subordinates (15–40 in this context), they have their own supervisors to attend to, and they have many finan-cial and operational responsibilities. Given this, the likelihood that they are paying careful attention to the percentage of time that each respondent is working not just off-site but in an iso-lated setting is quite low. Thus, it is possible that supervisors' ratings of respondents' isolation could reflect some broader impression of the respondent (e.g., liking) or the total amount of communication with the respondent (face-to-face as well as technologically mediated). This makes it likely that each respondent is relatively more knowledgeable about the extent to which he or she works in an isolated setting than is his or her supervisor. Thus, we concluded that self-reported isolation is likely to be more valid than a supervisor's assessment.
[4] Prominent psychometricians have shown that the validity of the items in psychological tests is far more important than the number of items. In principle, a single-item test that is highly valid should have higher construct and predictive

validity than a multiple-item test composed of inferior items (Burisch 1984).
[5] We conducted a square-root transformation given that the dis-tribution differed only moderately from normality and con-tained no negative response values. Subsequent regression analyses revealed an identical pattern of results when physi-cal isolation was transformed and when it was not. Thus, the results reported herein use respondents' raw scores for physi-cal isolation to maximize interpretability.
[6] We conducted a square-root transformation, and subsequent regression analyses revealed an identical pattern of results when physical isolation was transformed and when it was not. Thus, the results reported herein use respondents' raw scores for physical isolation to aid interpretability.
[7] We thank an anonymous reviewer for suggesting this analysis.
[8] We also assessed the interactive effect of the degree of phys-ical isolation and tenure in a virtual work arrangement on both perceived respect and organizational identification, and we found no significant effects. An implication of this finding is that the length of time one has been working virtually does not buffer a person from the negative effect of physical isola-tion. In addition, we tested the interactive effect of perceived respect and tenure on organizational identification and, again, found no significant interaction, suggesting that tenure does not significantly moderate the relationships in our model.
[9] We thank the editor for suggesting this interesting possibility.

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