LET MY PEOPLE GO HOME SICK:

DEVELOPING A HEALTH-SPECIFIC FORM OF TRANSFORMATIONAL LEADERSHIP TO EXAMINE EMPLOYEE PRESENTEEISM AND COWORKER SUPPORT

A Dissertation

Presented to

The Faculty of the Department

Of Psychology

University of Houston

In Partial Fulfillment

Of the Requirements of the Degree of

Doctor of Philosophy

By

Cody J. Bok

May 2019

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ABSTRACT

Employee presenteeism, the act of showing up to work when one is ill, is a major problem in companies. However, research on its prevention is sparse and conflicting. Using transformational leadership theory (Bass, 1985), I developed and tested an occupational health specific form of transformational leadership that aimed to reduce follower presenteeism. Occupational health specific transformational leadership (OHSTL) was designed to influence the values of health and well-being for employees, labeled health consciousness in this study. However, results suggest that OHSTL is positively associated with presenteeism, as well as favorable attitudes towards and intentions to engage in presenteeism. Additionally, there was only one mediation effect found, where OHSTL was positively associated with favorable attitudes toward presenteeism through health consciousness. However, alternative analyses using time one data only, suggest that OHSTL may negatively influence attitudes towards presenteeism through health consciousness, presenting a contradictory finding. Despite these findings, coworker support moderated the relationship between OHSTL and presenteeism, such that high levels of both OHSTL and coworker support were associated with reduced attitudes and intentions towards presenteeism. Without the support of coworkers, OHSTL is associated with increased levels of presenteeism. Theoretical and practical implications are discussed.

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Introduction

Presenteeism, or the act of showing up to work while ill (Aronsson, Gustafsson, & Dallner, 2000; Miraglia & Johns, 2016), is not a new phenomenon, with some scholars noting that Mark Twain coined the term in 1892 (Miraglia & Johns, 2016). However, presenteeism did not come under scholarly investigation until relatively recently. Prior to research on presenteeism, most research on the organizational impact of employee health concerned itself with absenteeism and how to minimize it and its deleterious outcomes (e.g., turnover; Porter & Steers, 1973). However, presenteeism accounts for up to 60% of an organization's health-related costs (Hemp, 2004). For example, bank and call center employees who suffer from seasonal allergies spend less time on work calls as they take more time to deal with congestion than those who are allergy free (Hemp, 2004). Additionally, chronic health problems, such as migraines, depression, and lower back pain, can cause employees to attend work despite their illness and negatively impact productivity (Hemp, 2004; Johns, 2011). Each of these conditions can cause employees to miss meetings and pay less attention to work due to the difficulty associated with their pain management. Despite getting some work done through coming into work ill, showing up sick only prolongs reduced productivity. Presenteeism is also more prevalent than absenteeism in workplaces (Gosselin, Lemyre, & Corneil, 2013). The associated cost of presenteeism, reaching up to $150 billion annually (Luksyte, Avery, & Yeo, 2015), illustrates the seriousness of presenteeism and calls researchers to invest more in exploring presenteeism to better understand it and identify potential solutions.

Research on presenteeism shows that leader support is useful to employees (e.g., Biron & Bamberger, 2012; Miraglia & Johns, 2016). However, it is unclear whether supervisor support promotes or inhibits presentee behavior. Some suggest that leaders provide psychological

resources that act as a stress buffer that improves overall health and well-being, thereby reducing illness and subsequently presenteeism (Biron & Bamberger, 2012; Miraglia & Johns, 2016). Other researchers suggest that leader support results in increased presenteeism because employees appreciate the support and want to sacrifice for their leaders in order to be productive and reciprocate by coming to work even when they're unwell (Nielsen & Daniels, 2016). There may be truth in each of these lines of thought, as evidenced in a meta-analysis on presenteeism conducted by Miraglia and Johns (2016). Their results suggest that leaders can improve well-being and thus reduce presenteeism through a health path. In other words, leaders' influence on employees was associated with improved health and reduced illness, and by extension less presenteeism. Additionally, they found that leaders can indirectly promote presenteeism through increased positive attitudes. This suggests that followers with supportive leaders want to reciprocate by devoting more time and effort into their role regardless of their health. The research by Miraglia and Johns (2016) presents a gap in leader effectiveness within the health domain. However, examining specific forms of leadership may help to better bridge this gap.

Transformational leadership is a well-studied leadership theory (Judge & Bono, 2000) that details four primary facets through which leaders influence followers: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Research suggests that workers with transformative leaders are more likely to voice concerns and be heard by their supervisors (Detert & Burris, 2007) and to improve organizational commitment (Barling, Weber, & Kelloway, 1996). On top of improved employee attitudes, transformational leadership is also associated with increased performance (e.g., Howell & Hall-Merenda, 1999).

Research in transformational leadership has even led to domain-specific conceptualizations. For example, when studying safety behaviors in restaurant staff, Barling,

Loughlin, and Kelloway (2002) created a unique safety-specific transformational leadership construct to predict occupational injuries. They demonstrated that the same elements of transformational leadership can be used to garner improved workplace safety. For example, leaders with high levels of idealized influence inspire followers to value safety via leaders' demonstration of their commitment to safety. As such, they hypothesized that leaders would generate greater employee awareness of safety and a stronger safety climate that reduced accidents in the fast-food industry. Their research showed that employees with leaders high in safety-specific transformational leadership had fewer injuries. The research by Barling et al (2002) demonstrates that alternative conceptualizations of transformational leadership can offer unique contributions to leadership literature and aid in the prediction of narrow outcomes, such as safety. I suggest that specific forms of transformational leadership may also help to consistently predict another narrow employee outcome, namely presenteeism.

Similar to how leaders who emphasize safety to their followers yield increased workplace safety, a leader who promotes workplace health and well-being may mitigate presenteeism and improve follower health. In fact, a study by Zwingmann, Wegge, Wolf, Rudolf, Schmidt, and Richter (2014) found that the effects of transformational leadership can positively impact employee health and well-being. However, conflicting research presents how the same positive qualities in transformational leadership are also associated with negative health behaviors, such as presenteeism (e.g., Baker-McClearn, Greasley, Dale, & Griffith, 2010). At this stage, research investigating the association between leadership with presenteeism presents opposing findings; some research (e.g., Zwingmann et al., 2014) supports a negative association between leadership and presenteeism (i.e., leadership is associated with a reduction in presenteeism), and other research (e.g, Baker-McClearn et al., 2010) supports a positive association between leadership

and presenteeism. These conflicting studies each examined a distinct mediator to explain the relationship between leadership and presenteeism. That is, both studies demonstrated unique processes through which leadership impacted presenteeism (i.e., leadership can reduce presenteeism via improved employee well-being and also encourage presenteeism via positive employee attitudes and reciprocity). As noted by Miraglia and Johns (2016), both of these processes make sense. However, one way to address the conflicting findings associating transformational leadership with follower presenteeism is to explicitly assess how transformational leadership can influence occupational health. Instead of the two pathways (follower health and follower attitudes) explaining the relationship between leadership and presenteeism proposed by Miraglia and Johns (2016), a specific form of leadership may both promote workplace health and foster positive subordinate attitudes without incurring presenteeism. As such, I plan to develop an occupational health specific form of transformational leadership that may help mitigate presenteeism. By establishing a new form of transformational leadership, I hope to take advantage of the positive aspects of leader behavior on employees' well-being while also inhibiting subsequent employee presenteeism through leader promotion of workplace health values.

Accordingly, in this study I propose to develop and test another specific form of transformational leadership, occupational health specific transformational leadership (OHSTL), and test its effect on presenteeism. In doing so, I will examine whether employees with occupational health specific transformational leaders will engage in less presentee behavior. Consistent with the theory of transformational leadership (Bass, 1985), I expect leaders who are particularly passionate about employee health and well-being to be more likely to establish a shared vision surrounding occupational health and well-being that becomes internalized in

followers. These leaders should also attend to employees who come to work while ill by working with them to ensure they are still able to contribute to work but also endorse them taking time to recover. Additionally, I expect these leaders will set a personal example through modeling appropriate health and well-being behaviors, inspiring others to also take more care in regards to health. Through the demonstration of their value of workplace health, leaders focused on health will promote increased health consciousness in each of their subordinates. Thus, I expect these leaders will effectively establish value congruence as it pertains to health and well-being in the workplace. Health consciousness refers to an increased awareness of personal health and well-being, particularly in the context of the workplace. To illustrate, an employee with increased health consciousness will better consider the impact of attending work while ill from a productivity and contagion standpoint. Subsequently, employees with increased health consciousness should be more aware of their health-state and thus be less likely to attend work while ill (i.e., reduced presenteeism).

Even with supervisors high in OHSTL, it is possible that employees may still engage in presenteeism if they do not have the support of their coworkers. Indeed, one of the most cited reasons employees give for presenteeism is not wanting to ask coworkers to cover for them (Aronsson & Gustafsson, 2005). Thus, if employees have a supportive supervisor but lack supportive coworkers, then they may still engage in presenteeism. However, if coworkers demonstrate support to their peers, then employees are generally happier (Chiaburu & Harrison, 2008). Research supports this notion and suggests that not only are coworkers a potential major support system (Miraglia & Johns, 2016) but are distinct even when accounting for leadership (Chiaburu & Harrison, 2008). Therefore, I plan to also assess coworker support as it is a vital

component to preventing presenteeism and can serve to inhibit, or augment, occupational health specific transformational leadership.

This study is the first of its kind to develop a health specific form of transformational leadership. Through expanding the literature in transformational leadership, I hope to lend greater theoretical range to the construct through its extension into the occupational health domain. Additionally, this study uniquely aims to mitigate the growing problem of presenteeism. Presenteeism is now becoming a major issue in many organizations, costing millions every year in productivity loss (Luksyte et al., 2015). By addressing the presenteeism epidemic through leadership, it may be possible to improve employee awareness of issues concerning health and well-being in the workplace. The promotion of both well-being and health consciousness could potentially see boosts in employee productivity and engagement through improved workplace health practices.

In the following sections, I will elaborate on why presenteeism deserves more research attention and how to provide a solution to help mitigate it in the workplace. First, I will discuss the presenteeism literature and provide an overview of the concept and findings. I will then provide an overview of the transformational leadership literature. Next, I will discuss how transformational leadership can be transformed to be specific to occupational health and how it can mitigate presenteeism behaviors. Additionally, I will provide rationale for how OHSTL can mitigate presenteeism through employee health consciousness. Last, I will discuss how coworker support can augment OHSTL's negative impact on presenteeism.

Presenteeism

Presenteeism is defined as showing up to work while ill (Aronsson, Gustafsson, & Dallner, 2000; Johns, 2011; Miraglia & Johns, 2016). However, presenteeism has also been

defined as reduced work productivity due to being ill or unhealthy (Hemp, 2004; Turpin et al., 2004). Johns (2010) notes these definitions are unproductive and unparsimonious because they add extra components to the construct that cannot be measured without major criterion contamination. This is because productivity loss can be associated with many factors, leaving it nearly impossible to isolate productivity loss due to presenteeism. Miraglia and Johns (2016) corroborate this logic and consider the compound definition of presenteeism unnecessary. Productivity loss due to employee illness is too difficult to isolate from other forms of productivity loss. Thus, this study will use the definition in line with Miraglia and Johns (2016) along with others (e.g., Aronsson et al., 2000; Johns, 2010; 2011) that presenteeism is attending work while ill.

Initially, researchers believed that the illnesses associated with presenteeism were "less severe" than those associated with absenteeism (e.g., Ceniceros, 2001; Lowe, 2002). For example, headaches, allergies, depression, asthma, and stomach issues were thought to be the primary maladies associated with presenteeism (e.g., Ceniceros, 2001; Hemp, 2004). However, the nature and severity of illnesses present in absentee and presentee employees are very similar (Caverley, Cunningham, & MacGregor, 2007). Thus, companies can expect employees with a severe cold or a chronic headache to engage in presenteeism. Equally, these same employees may elect to be absent from work during their illness.

Several factors identified by research can help to illuminate what causes an employee to choose presenteeism over absenteeism. For example, Aronsson et al. (2000) found that education and healthcare professionals (e.g., teachers and nurses) exhibited the most presenteeism, a fact that has been supported in subsequent research (e.g., Aronsson & Gustafsson, 2005; Dew, Keefe, & Small, 2005). In a continuation of research on antecedents to presenteeism, Aronsson and

Gustafsson (2005) found that difficulty of replacement is another factor that predicts presenteeism, especially for those who have to make up missed work (e.g., doctors, teachers). Additionally, employees who had a lower income were more apt to attend work while ill (Aronsson et al., 2000; Aronsson & Gustafsson, 2005). Presumably, these are hourly positions where employees must show up to work to earn their wages, such as the retail and food industries. More recent studies have also identified other antecedents that are positively related to presenteeism, such as task significance (Johns, 2011), psychological stress (Gosselin et al., 2013), social pressures (Dew et al., 2005), work overload, and attendance reinforcement (Deery et al., 2014). Johns (2011) shows that task significance, the feeling of doing meaningful work, motivates employees to attend while ill because those for whom they work (e.g., students, patients, clients) rely upon them. Gosselin et al (2013) speculate that psychological stress spurs presenteeism because stress may exert a compound pressure on employees. Employees who experience great amounts of stress are more likely to become ill and thus have an increased risk of attending while ill (presenteeism) as well as absenteeism (e.g., MacGregor, Barton-Cunningham, & Caverley, 2008). Work overload increases the likelihood of presenteeism because employees who are faced with overwhelming work demands do not feel as though they can take time off of work out of fear of the workload becoming insurmountable (Deery et al., 2014).

In addition to antecedents that are positively related to presenteeism, researchers have also identified antecedents that are associated with lower levels of presenteeism. For example, higher leader member exchange (LMX; Dansereau, Graen, & Haga, 1975) was associated with perceptions of increased job security and less family interference, which promotes employees to take leave when sick (Ferreira, Martinez, Cooper, & Gui, 2015). Thus, high quality leadership

appears to be an important way to mitigate presenteeism and its effects. In a similar vein, supportive work environments may also help to reduce the likelihood of presenteeism. For example, employees working in a supportive environment are more likely to disclose health information to colleagues or managers (Munir, Leka, & Griffiths, 2005). Disclosure of illness reduces coworker and manager perceptions of unjustified absence, and thus employees are encouraged to stay at home when they are sick. Additionally, supportive workplaces also serve as buffers against stress and strain associated with work, thereby reducing potential health issues (Biron & Bamberger, 2012).

Despite the positive effect that supportive workplaces have on employees, there is contradictory research suggesting that supportive work environments may actually spur presenteeism (e.g., Baker-McClearn, Greasley, Dale, & Griffith, 2010; Caverley et al., 2007; Hansen & Andersen, 2008). Due to receiving higher levels of workplace support, employees may be more likely to spend time and energy at work while ill to repay their supportive colleagues by reducing any burden they would have to deal with if the employee were absent (Christian, Garza, & Slaughter, 2011). That is, employees who work in supportive environments may be opposed to potentially jeopardizing coworker support by requesting shift coverage and are thus more likely to attend work while ill (Miraglia & Johns, 2016).

A more specific form of transformational leadership may help to prevent employees from coming in while they are ill regardless of workplace support levels. A leader who focuses on workplace health may provide inspiration and support that motivates followers to maintain a healthy workspace. Indeed, research by Ferreira et al (2015) suggests that leadership is an important factor in reducing followers' fears of job security and family interference, encouraging them to take off when they are sick. Additionally, leaders focused on occupational health may

create environments that are conducive to happier employees who are more committed to their work. Through increased focus on workplace health and support for their subordinates, health leaders may also improve followers' overall health (e.g., Biron & Bamberger, 2012), which could subsequently reduce presenteeism. The following section will detail how leaders can influence employees' attitudes via increased value congruence around health issues in order to boost employee commitment to workplace health. Subsequently, the increased value of workplace health should result in reduced levels of presenteeism.

Occupational Health Specific Transformational Leadership

Many organizations rely on supervisors to act as representatives of the organization's values and policies (Stinglhamber & Vandenberghe, 2003). Due to their close contact with employees and their status in the organizational hierarchy, supervisors influence workers' job values, attitudes, and behaviors at work (O'Driscoll & Beehr, 1994). It is thus important for supervisors to establish positive relations with subordinates and to cultivate norms to better encourage subordinate compliance in achieving expected outcomes (Wayne, Shore, & Liden, 1997). In addition to accomplishing organizational goals, effective leaders also consider employees' individual needs and circumstances to ensure their well-being. Indeed, there are studies that address the impact of leadership on employee well-being (see Kuoppala, Lamminpaa, Liira, & Vainio, 2008 for a review). Typically, research examining the relationship between leader support and employee well-being finds that greater levels of leader support are associated with increased levels of employee well-being (Kelloway & Barling, 2010). As an extension, supervisors with excellent leadership abilities could potentially mitigate presenteeism through improved follower relations and strong workplace values and norms.

Transformational leadership is the most widely studied form of leadership (Judge & Bono, 2000). Transformational leaders offer subordinates a bigger purpose that transcends the daily demands and goals of the organization (Judge & Piccolo, 2004). The theory details the mechanism through which leaders can elevate employee motivation and effort. It is comprised of four facets: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985). Idealized influence, sometimes labeled as charisma, manifests as leaders who appeal to followers on an emotional level and, through their actions, cause followers to identify with them. Inspirational motivation refers to a leader's level of vision and subsequent articulation of vision that inspires followers to be optimistic and to perform at a higher level. Intellectual stimulation relates to how well leaders stimulate thoughts and ideas from subordinates and how much they aspire to challenge the status quo through creativity and strategic thinking. Lastly, individualized consideration is the degree to which leaders tend to subordinates' needs at an individual and group level. It is characterized by listening to follower concerns and acting as a personal advisor and mentor.

Transformational leadership has been linked with increased task performance, organizational citizenship behaviors (e.g., Piccolo & Colquitt, 2006), subordinate job satisfaction, follower satisfaction with leader, leader effectiveness (e.g., Judge & Piccolo, 2004), organizational commitment (Barling, Weber, & Kelloway, 1996), and trust in management (e.g., Jung & Avolio, 2000). Moreover, transformational leadership was found to associate with reduced job-related stress via individualized consideration (Sosik & Godshalk, 2000). Another study found that followers of transformational leaders experienced increased happiness and overall satisfaction in addition to reduced stress (Bono, Foldes, Vinson, & Muros, 2007). Using an experience sampling, within-persons, design, Bono et al. (2007) tracked health care

employees' perceived levels of stress and satisfaction when interacting with supervisors, who were measured for levels of transformational leadership. Followers experienced increased optimism and reduced stress when interacting with supervisors with high – opposed to low – levels of transformational leadership.

Expanding beyond improved employee general well-being, researchers have further developed the transformational leadership construct to improve other important aspects of the workplace. For example, Barling et al. (2002) created a unique form of transformational leadership that focused on workplace safety. They developed a new construct, safety-specific transformational leadership, to assess if leadership would be an effective way to reduce workplace accidents and injuries. Safety-specific transformational leadership is described as transformational leadership that, instead of being general in aim, emphasizes safety in the workplace. They discuss the need for a safety-specific form of transformational leadership because they felt that a novel form of transformational leadership could extend beyond traditional employee performance outcomes and better predict more specific outcomes, such as safety. Based on the assumptions of the original theory of transformational leadership, Barling et al (2002) thought that each of the facets of transformational leadership was apt to enhance workplace safety. Their items reflect the original transformational leadership construct with an emphasis on safety. For example, one item reads "My supervisor talks about his/her values and beliefs about the importance of safety" (Barling et al., 2002, p. 491). In their study, they examined restaurant employees and their supervisors to see if employees with leaders high in safety-specific transformational leadership experienced fewer workplace safety incidents and injuries. Indeed, they found that the safety-specific form of transformational leadership predicted workplace safety. One of the key benefits to their research is that companies can target

leadership through training to help improve workplace safety. Leader training would save companies money when compared to major investments in ergonomic design and other costly implementations (Barling et al., 2002).

Much in the same way that Barling et al (2002) expanded upon and developed a specific form of transformational leadership, I plan to develop a unique, health-specific form of the construct. I define OHSTL as a specific form of transformational leadership that focuses on leaders' ability to support and encourage followers to live a healthy lifestyle and prioritize general health and well-being before work. One reason to study OHSTL is that leadership does appear to impact follower health (e.g., Kelloway & Barling, 2010), and employees with transformational leaders are associated with increased optimism, reduced stress, and generally improved perceptions of well-being (Bono et al., 2007). Additionally, followers who receive greater amounts and higher quality supervisor support experience improved satisfaction and reduced occupational strain (Halbesleben, 2006).

Most importantly, the OHSTL construct addresses the gap in research examining the effect of leadership on presenteeism (e.g., Miraglia & Johns, 2016). As opposed to two possible pathways where leaders can promote presenteeism through one (e.g., positive attitudes) and mitigate it through another (e.g., health), I propose that the OHSTL construct mitigates presentee behavior without sacrificing the positive attitudes generated in followers that tend to generate presenteeism (e.g., Baker-McClearn, Greasley, Dale, & Griffith, 2010). Traditional forms of leadership tend to assess fairly broad outcomes, such as general well-being, performance, and attitudes (e.g., Judge & Piccolo, 2004). Transformational leadership's broad focus could explain the conflicting findings in presenteeism research (e.g., Miraglia & Johns, 2016). I expect that because OHSTL's specificity matches the specificity of the outcome of interest (i.e.,

presenteeism), theoretically, a consistent negative relationship between OHSTL and presenteeism will be found.

In addition to positive associations with employee well-being, each component of transformational leadership may uniquely affect occupational health. In terms of idealized influence, managers can become role models demonstrating the importance of health and the value placed on it. For example, a supervisor may decide to leave early or take a day off to recover and prevent contamination when sick despite not completing their daily goals. This suggests that supervisors value their long-term health more than the short-term demands of their work. Essentially, leaders high in idealized influence can shift focus from productivity demands to occupational health as a core value, permitting followers to do the same. This may also result in increased follower trust and loyalty in management, an important correlate of performance (Pillai, Schriesheim, & Williams, 1999). Supervisors can use inspirational motivation to garner a belief that their followers can be healthier and still productive beyond what they previously thought possible. For example, a supervisor high in inspirational motivation may describe how they were able to achieve many deadlines successfully despite being in the hospital for an infection. By using a story, the supervisor may inspire in others that it is still possible to seek medical assistance and get better and still effectively utilize their time to achieve organizational goals. With intellectual stimulation, leaders can invoke creativity and innovation in their followers by challenging prior held beliefs and policies surrounding occupational health. Through this form of dialogue, leaders can improve occupational health and stimulate communication around occupational health and best practices. For example, a leader may stimulate followers to come up with the idea that they may work from home while ill, that way they can address any critical emails or assignments and still be able to rest and recover at home.

Finally, through individualized consideration, leaders can establish and maintain interest in each follower's health and well-being. Through this consideration, leaders are able to demonstrate authentic care for followers' health and show that they are committed to achieving higher standards of occupational health than those set by the organization or government.

OHSTL extends the idea of traditional transformational leadership by narrowing its focus to employee health and well-being. In line with traditional transformational leadership theory (Bass, 1985), OHSTL should have a direct influence on followers' values, ideas, and behaviors. However, OHSTL will specifically focus on values surrounding occupational health instead of broad ideas associated with general performance (e.g., Judge & Bono, 2000). This means that OHSTL can potentially – and specifically – mitigate the likelihood of employees attending work while ill.

In order to achieve the goal of reducing employee presenteeism, the OHSTL construct should evaluate leaders' effectiveness in supporting and encouraging followers to live a healthy lifestyle and prioritize general health and well-being before work. In theory, these leaders will promote working at full capacity (i.e., while healthy, not ill) and understand the relative risk of employees who work while ill from both a productivity and contamination standpoint. In essence, OHSTLs are able to neutralize presenteeism via spreading their value of health to their followers and also maintaining positive follower attitudes. Additionally, leaders high in OHSTL may have healthier followers overall due to their values and practices that promote healthy workplace behaviors (e.g., not coming in while ill, using sanitizers when necessary, covering coughs and sneezes). Through this greater understanding of work productivity and illness, these leaders will make clear their values about health and well-being and increase employee awareness of health, which should result in less presenteeism. Thus, I hypothesize that

supervisors rated as having higher levels of OHSTL will be associated with decreased levels of presenteeism.

Hypothesis 1: OHSTL will be negatively related to presenteeism.

Health Consciousness

Transformational leaders are capable of elevating follower awareness of highly valued outcomes and can transform followers' personal values (Jung & Avolio, 2000). Early studies on transformational leadership consistently demonstrate leaders' abilities to influence followers to internalize values with respect to organizational goals (e.g., Bass & Avolio, 1993; House & Shamir, 1993). Similarly, I expect that OHSTLs will influence followers to internalize health-related values. Values are broad views held by individuals regarding the importance of particular behaviors and outcomes (Edwards & Cable, 2009; Meglino & Ravlin, 1998). When value congruence or similarity exists between supervisors and subordinates, both leaders and followers interpret events similarly (Meglino, Ravlin, & Adkins, 1989). This value overlap reduces uncertainty and improves communication and coordination between followers – and across followers – and leaders (Schein, 1985). By increasing follower awareness about the importance and value of occupational health and well-being, OHSTLs will foster employee health as a core value to their workgroup. This should ultimately result in reduced levels of presenteeism.

The process by which transformational leaders generate values in followers is a major focus of the transformational leadership model (Bass, 1985). Transformational leaders create value congruence through the emotional involvement of their followers in the leader's values and goals. Leaders can boost follower emotional involvement through simple dialogue that highlights the importance and value of desired outcomes (Jung & Avolio, 2000). For example, a leader can discuss the importance of health in the workplace and explain the negative impact that attending

work while ill will have on peers and productivity with his subordinates. After articulating the importance and value of specific outcomes, leaders can then express their desire to raise their expectations of their followers in achieving the new goal (Avolio & Bass, 1988). To illustrate, a supervisor may set goals for her team to work from home when sick or to keep hand sanitizer at their desk to improve the workplace's atmosphere of health. The process of explaining values, setting goals, and raising expectations for group members helps establish a shared vision around the leader's goal. In the case of OHSTL, the leader will convey the importance of health in the workplace and set goals to reduce presenteeism and to improve the atmosphere of health in the workplace. The shared vision unites the leader and followers, in which the leader's original vision can be internalized as a value by followers as a result of leaders serving as role models (Bass, 1985). Ultimately, if leaders successfully instill values into their followers, then followers will be more likely to be personally invested in their fulfillment (Bono & Judge, 2003). In other words, followers will view work toward the goal as more meaningful and have a personal commitment toward achieving the goal (Shamir et al., 1993).

Often, the desired outcomes stemming from transformational leadership are mediated by employee-supervisor value congruence and trust, among other employee attitudes (Jung & Avolio, 2000). Research by Jung and Avolio (2000) shows that transformational leadership not only directly influences employee performance but also indirectly influences performance through value congruence and trust. They conclude that their findings contribute to the better understanding of how leaders influence and motivate their followers. Indeed, their research offers insight into the underlying processes of leader influence. Barling et al. (2002) utilize the concept of value congruence as well to show that a safety-specific form of transformational leadership increases occupational safety through both perceived safety climate and employee

safety consciousness. Using the same principles as Jung and Avolio (2000), Barling et al. (2002) were able to demonstrate how transformational leaders influenced follower safety values through traditional elements of transformational leadership. Leaders who make safety one of their core values to be achieved can inspire subordinates to also value safety and its attainment in the workplace. Similarly, I plan to demonstrate how OHSTLs can influence subordinates to value health and well-being and achieve their vision of mitigating presentee behavior.

Much like Barling et al. (2002) used the concept of value congruence to demonstrate that safety specific transformational leadership reduced workplace accidents through raised safety consciousness, I also plan to demonstrate that OHSTLs reduce presenteeism through raised health consciousness. I define health consciousness is the manifestation of individual awareness of health issues in the workplace. Individual health consciousness can be observed at both cognitive and behavioral levels. Cognitively, health consciousness is comprised of the awareness of workplace health issues as well as knowledge of the behaviors required to ensure health and well-being. Transformational leaders can increase individual health consciousness through stimulating employee thoughts around health and well-being. For example, a supervisor may engage in intellectual stimulation by discussing the seriousness of illness contagion and how it is better to take a day off opposed to come in and potentially contaminate coworkers which could result in more sickness and subsequent absence and productivity loss. Additionally, supervisors can engage in idealized influence by modeling behaviors such as using sick days or working from home when they are ill. They may also take extra precautions to keep the office clean by incorporating public hand sanitizer and sanitary wipes, particularly if employees work in a desk share arrangement. Through expressing the importance of health and well-being in the workplace and by modeling relevant behaviors, OHSTLs can inspire followers to internalize this value and

strive to improve the health environment at work. Additionally, each of these actions and discussions taken by OHSTLs will serve to establish a shared vision with their followers, thereby making the group as a whole more united in achieving improved workplace health. When followers take on the value of workplace health and well-being, they increase their health consciousness, and thereby increasing the likelihood that employees notice and take action when health situations arise. Thus, a high OHSTL supervisor's influence on employees' health consciousness should subsequently result in decreased levels of presenteeism in the workplace.

Hypothesis 2: Health consciousness will partially mediate the relationship between OHSTL and presenteeism.

Moderating Effect of Coworker Support

One of the most commonly reported reasons for presenteeism is not wanting to burden coworkers (Aronsson & Gustafsson, 2005). Sick employees often do not feel that it is fair to ask their peers to pick up their tasks in addition to their own. However, when employees feel they can expect the support of their peers when taking an absence, then presenteeism rates decrease (Gosselin, Lemyre, & Corneil, 2013). Indeed, coworker support is another major resource in addition to good leadership that helps to mitigate presenteeism (Miraglia & Johns, 2016).

Coworker support can manifest as helping peers out with work tasks, known as instrumental support, or listening to peers and providing empathetic support, known as emotional support (Beehr, Jex, Stacy, & Murray, 2000). Both instrumental and emotional forms of coworker support are considered to be unique forms of support that may buffer against workplace stressors (Cohen & Wills, 1985). Additionally, coworker support is also associated with improved job satisfaction, as people generally enjoy their job more when they work in a supportive social environment (Chiaburu & Harrison, 2008). When studied by Chiaburu and

Harrison (2008), coworker support yielded incremental variance beyond leadership when predicting employee attitudes (e.g., job involvement, commitment, and satisfaction) and withdrawal (e.g., effort reduction, intention to quit). This is likely because peers constitute the greatest amount of interaction a single employee experiences on a daily basis. Additionally, due to the increasingly flat structure of organizations and expanding implementation of teams within companies, coworker support is becoming more and more vital to employee well-being and work attitudes (Chiaburu & Harrison, 2008; Schneider, 1985).

In the context of presenteeism, coworkers may serve as a much-needed support network. In particular, instrumental support is crucial to reducing presenteeism. For example, when confronted with the option to stay home while ill or to come in, instrumental support from coworkers could be the difference between coming in ill or staying home to recover. As stated earlier, instrumental support manifests as coworkers helping each other to get important work tasks done (Beehr et al., 2000). For example, sick employees can ask and depend on coworkers to cover for them so that they can stay home and recover. Both instrumental and emotional support help employees cope with workplace stressors (Cohen & Wills, 1985) but emotional support is restricted to cognitive and emotional stressors and does not theoretically prevent presenteeism in the same way that instrumental support can. To illustrate, despite feeling emotionally fine, an employee may still fall ill. If the employee's coworkers only provide emotional support (i.e., talking with them and being reassuring) without offering instrumental support (i.e., cover the sick employee's shift), then the employee may still engage in presenteeism. Because of its ability to potentially mitigate presenteeism at its most proximal point of effect (i.e., after an employee falls ill), I will focus solely on instrumental support in this study.

Despite the created value of health consciousness established by a supervisor, coworker instrumental support is invaluable to employees. Just as supervisors can be either beneficial or detrimental (Fiedler, 1996), so too can coworkers (Chiaburu & Harrison, 2008). It is possible that OHSTLs may inspire employees to be more health conscious at work, but OHSTLs may not be as effective at reducing presenteeism if one's coworkers will not provide instrumental support when needed (i.e., to cover for them when they are sick). As such, if a leader is high in OHSTL, OHSTL's negative effect on presenteeism may be weakened if coworker instrumental support is absent. For example, employees with a supervisor high in OHSTL may strive for achieving a healthy workplace. However, if any of the employees fall ill but none of the other employees offer to help the employee, whether by covering a shift of providing meeting notes, then sick employees may still attend work while ill due to the lack of coworker instrumental support. Conversely, if employees can easily obtain instrumental support from their peers, then the effect of a leader high in OHSTL may be augmented, resulting in even less presenteeism. When instrumental support is present in a workplace, the effect of OHSTLs on employees' health consciousness may create an environment that is more conducive to requesting for instrumental support when employees fall ill. Therefore, supportive coworkers can further enhance the effect of OHSTL, resulting in even fewer instances of presenteeism.

Hypothesis 3: Coworker support will moderate the relationship between OHSTL and presenteeism, such that high levels of coworker support will augment the negative effect OHSTL has on presenteeism and low levels of coworker support will reduce the negative effect OHSTL has on presenteeism.

Method

Participants and Procedure

The study targeted a diverse sample of employed adults across industries. I recruited participants from the population of working students enrolled in the University of Houston. I used random sampling techniques via University of Houston's student sampling software, SONA. All data were collected through Qualtrics.com, which was hosted on the SONA website. Participants were not compensated but received extra credit in their selected courses. Participants were told that in order to be eligible to participate they needed to be 18 years or older, work at least 20 hours/week, and have worked in their current job for at least 6 months.

A total of 299 individuals agreed to participate in the initial survey (time 1). Of the 299 initially recruited, only 82 completed the second phase (time 2), a 27% completion rate. I imported each raw file from excel into individual SPSS files and then merged the datasets. A total of 33 cases were dropped from the time 1 sample and 19 cases dropped from time 2, for either failing to meet the eligibility requirements (i.e., were less than 18 years of age, worked less than 20 hours/week, worked in their current job for less than 6 months, or did not give consent) or providing insufficient data (i.e., skipped more than 7 items). Participants were also dropped if they failed to correctly answer at least three out of four catch items designed to identify non-conscientious responders. An example item is, "Please select 'tree' from the following options for research purposes." In total, 20 participants were dropped for non-conscientious responding– although these participants overlapped greatly with those who failed to fill out most of the survey. I then ran exploration analyses on all variables in the dataset to identify issues with skewness, kurtosis, and outliers. All variables had acceptable skew and kurtosis. However, I did flag a total of five more cases for providing outlier responses. I flagged 3 participants who

provided outlier responses (2 or more standard deviations from the mean) for the presenteeism (T1) outcome criteria. The outlier analysis results revealed that outlier responses began at 15 days indicated being presentee (M= 3.18, SD=5.69), with outlier values ranging from 15 – 80 days reported presentee. I also flagged 1 participant with an outlier response for presenteeism (T2) who responded with the outlier value of 22 days presentee (M= 2.82, SD= 3.52). I also flagged 1 participant as an outlier on the coworker support (T1) predictor. The outlier analysis results revealed that the outlier was at the value of 1 for coworker support (M= 3.85, SD= 0.82). The final sample size was 267 for time one and 72 for time 2.

Participants indicated their age (M=23.2 years, SD=5.6), tenure with employer (M=6months-2years, SD=.91), gender (83.9% female), ethnicity (37.1% Hispanic, 27.3% white, 22.1% Asian, 12.0% African American, 0.7% Other, and 0.4% Native American), and job type (86.9% hourly; 12.7% salaried).

The data collection was conducted in a multi-wave format, with two timepoints occurring six weeks apart. I gathered all experimental variables at both timepoints. At time 1, I also gathered the control variables: absenteeism, replaceability, job type (salary vs. hourly), and chronic health condition. According to Rosenthal and Rosnow (1991), a cross-lagged correlational design provides necessary – but not sufficient – information about the causal relationship between variables. Additionally, collecting variables at two timepoints allows for test-retest correlations (i.e., test-retest reliability). For presenteeism, test-retest correlations are important to examine participants' memory, as recall items typically suffer from recall bias (e.g., absenteeism; Harrison & Shaffer, 1994). Additionally, as the OHSTL construct is new, test-retest correlations helped to establish reliability, a necessary condition for validity. Finally, the cross-lagged design can also support the directionality of the hypotheses (Shadish, Cook, & Campbell,

2002). By examining the cross-lagged correlations, researchers can identify whether the correlation of the predictor at time one and the outcome at time two (i.e., r_{A1B2}) is greater, weaker, or similar to the reverse relationship (i.e., r_{B1A2}). Although Rogosa (1980) discussed the issues surrounding cross-lagged designs in regards to directionality, a cross-lagged design does lend more basis for directionality than a standard, single timepoint, cross-sectional design. Data were analyzed using Pearson correlations, linear regressions, as well as mediation analyses with Hayes' (2012) PROCESS macro in SPSS.

Measures

Occupational Health Specific Transformational Leadership (OHSTL). I measured OHSTL with an 8-item measure (α (T1) =.95; α (T2) =.94). The measure was a modified version of the 40-item transformational leadership scale by Bass (1985). Items were altered to focus on leaders' dispositions toward occupational health. For example, the item, "My leader is clear about his/her values and practices what he/she preaches" was altered to, "My leader practices the healthy lifestyle that s/he preaches." Participants were given a prompt, "The following items are designed to assess your perceptions of your CURRENT supervisor's attitudes and behaviors surrounding health in the workplace (health is defined as being sanity to prevent the spread of illness, leading an active lifestyle, eating well, and getting sufficient sleep)." Participants were then asked to indicate their level of agreement with each item using a 5-point response scale, which ranged from 1 "Strongly Disagree" to 5 "Strongly Agree."

Additionally, I conducted a confirmatory factor analysis (CFA) on the new OHSTL scale to assess whether it maintained the similar four facet structure of traditional transformational leadership. The final measure was condensed following CFA analyses described below. All items can be found in Appendix A.

Transformational Leadership. Transformational leadership was assessed using the 7-item Global Transformational Leadership Scale (Carless, Wearing, & Mann, 2000; α=.95). This measure was included to provide a cross-check with the OHSTL scale to help demonstrate convergent and discriminant validity. In addition, this scale served as a control to identify whether OHSTL performs beyond general transformational leadership when predicting presenteeism. A sample item is, "My leader is clear about his/her values and practices what he/she preaches." Scale based on a 1-5 scale, where 1= "Rarely or never" and 5= "Very frequently, if not always." All items can be found in Appendix B.

Health Consciousness. I measured health consciousness with a 7-item researcher developed measure (α (T1) =.87; α (T2) =.84). However, the scale was reduced to 4 items after CFA analysis. In constructing the scale, I considered how leaders high in OHSTL could influence the values of their followers with respect to health and well-being in the workplace. To this effect, I thought about how increased values of health and well-being would influence how employees would think about and be aware of their own health as well as others in the workplace. I thus wrote each item with this consideration in mind and attempted to assess the internal (or cognitive) awareness of employees' perceptions of health and well-being. An example is, "I realize that I'm an important part of keeping the workplace healthy." In line with all items referring to the cognitive level (i.e., attitudes and perceptions) of health consciousness, I identified just one factor after conducting the CFA analysis on the scale items. The response scale ranged from 1 "Not at all like me" to 5 "Exactly like me." All items can be found in Appendix C.

Presenteeism. I measured presenteeism with a single item, "How many days during the past 6 months have you gone to work despite feeling that you should have taken sick leave due to

your health?" that was modified from Deery et al. (2014). Using a single item measure for presenteeism is in keeping with the majority of presenteeism research (e.g., Aronsson & Gustafsson, 2005; Deery et al., 2014; Gosselin et al., 2013; Johns, 2010; Neilsen & Daniels, 2016). Although a 12-month time period is standard (e.g., Bergstrom, Bodin, Hagberg, Aronsson, & Josephson, 2009; Neilsen & Daniels, 2016), other researchers have also used a 6-month time frame (e.g., Gosselin et al., 2013). Furthermore, due to the university student population under study, a 6-month employment was more reasonable to expect. Demerouti et al (2009) reported reliabilities for both a 6-month and 12-month time frame and found both to be consistent and related over time. Thus, to accommodate a student sample that has less work experience, I chose the 6-month time period to assess presenteeism (*M* (T1) = 2.74, *range* = 0 – 12; *M* (T2) = 2.84, *range* = 0 – 12).

Alternative Presentee Criteria. Although a one-item measure of presenteeism is standard in the literature, I decided to add peripheral measures of presenteeism to provide alternative criteria for the study because use of a single item measure could severely limit data analysis and interpretation if it suffered from range restriction. Research shows that attitudes and intentions toward a specific behavior are strong predictors of engaging in that behavior (Ajzen, 1991). In the same way that leaders high in OHSTL can mitigate presenteeism behavior through development of follower values, high OHSTL leaders should also influence employee attitudes toward and intentions to engage in presenteeism Thus, I created a 4-item scale assessing employees' attitudes (α (T1) =.83; α (T2) =.84) and a 3-item scale assessing employees' intentions (α (T1) =.94; α (T2) =.95) surrounding presentee behavior. A sample item for the presentee attitudes scale is, "I would rather go to work sick than miss a day." A sample item for the presentee intentions scale is, "I don't intend to take a sick day the next time I'm sick." Both

scales used a 5-point Likert scale that ranged from 1 “Strongly Disagree” to 5 “Strongly Agree,” where higher values indicate more favorable attitudes towards and intentions to engage in presenteeism. All items for presentee attitudes and intentions can be found in Appendix D.

Coworker Support. Similar to Halbesleben and Wheeler (2012), I adapted items from the POS scale by Eisenberger, Huntington, Hutchison, and Sowa (1986) to assess coworker support. Specifically, I altered items to specify support for employees who are ill and need coverage and support from their coworkers. Thus, I assessed coworker support using a 4-item scale (α (T1) =.85; α (T2) =.77) adapted from the original POS scale, substituting the term ‘coworkers’ for ‘organization’ as well as contextual phrasing for each item to focus on illness in the workplace. For example, one item is, “My coworkers are willing to extend themselves in order to keep me from falling behind if I’m ill.” The response scale ranges from 1 “Strongly disagree” to 5 “Strongly agree.” All items can be found in Appendix E.

Control variables. Johns (2010) notes that absence and presence should both be measured as they are both indicators on the scale of employee engagement. Additionally, research by Gosselin et al (2013) found that absenteeism and presenteeism are complementary (i.e., they are positively associated with each other). Thus, absenteeism should be controlled when analyzing whether OHSTL mitigates presenteeism. Absenteeism was included as a control and measured with a single item, “How many days of sick leave did you take during the last 6 months?”

Pre-existing health conditions was also controlled, as previous studies (e.g., Pohling et al., 2016; Schultz & Edington, 2007) found that pre-existing health conditions contributed to presenteeism. Thus, I controlled for pre-existing health conditions using the item, “Please indicate whether you have a chronic health condition (e.g., asthma, allergies, diabetes).” The

response options include: 0 = no health conditions known; 1 = at least one known chronic health condition; and 2 = prefer not to respond. For the analyses, I excluded those who chose prefer not to respond and used chronic health condition as a 2-option nominal scale.

Additionally, difficulty of replacement (i.e, replaceability) and job type both are positively associated with presenteeism (Aronsson & Gustafsson, 2005). Therefore, I also included both of these factors as control variables. Both were assessed using a dichotomous scale. Difficult of replacement was presented as, “Do you believe that no-one can perform your job but you?” Job type was assessed broadly as, “Indicate whether you are salaried or hourly: 0 = salary; 1 = hourly”. All control variables and their respective items can be found in Appendix F.

New Scale Refinement

When creating new scales, it is important to take into account theoretical rationale that supports each item. For example, building a new transformational leadership scale required that I consider the theory behind traditional transformational leadership and its subfacets as I created the items. Beyond using theory to compose items, it is important to also empirically test the new scale to examine whether or not it supports the theoretical structure after which it is modeled. The most common way this is achieved is through confirmatory factor analysis, which examines each item as it relates to other items within subfacets and as a whole scale (Kline, 2011). I conducted the confirmatory factor analysis on the scales using time 1 data. I chose time 1 for the analysis because the sample size was so much larger. A sample size of around 300 is suggested for factor analysis (Kline, 2011), which the first sample is much closer to the recommended size.

OHSTL. I conducted a confirmatory factor analysis (CFA) on the new OHSTL scale in SPSS AMOS. I anticipated finding 4-subfacets under one larger factor, in line with traditional transformational leadership scales (Bass, 1985). However, the results of the initial CFA model

showed poor fit with the data, $\chi^2(146) = 649.7$ (p=.00), CFI=0.894, RMSEA=0.115. Data indicated that there were out of bounds parameters in the subfacets (i.e., subfacet covariances were all near or above 1.0) that caused the poor model fit. However, all items had satisfactory loadings (i.e., all but two above .75).

In order to both improve the model fit and to make the OHSTL scale more parsimonious, I relied on the factor loadings and squared multiple correlations of each item to choose the strongest two items in each subfacet. Thus, I removed all but the highest two loading items in each of OHSTL's subfacets. This brought the OHSTL measure more in line with the 7-item global transformational leadership scale by Carless et al. (2000). Additionally, I reduced the model to a single factor, excluding the subfacets from the analysis due to issues with subfacet covariances as noted above. This is in line with meta-analytic findings suggesting that traditional transformational leadership scales do not consistently load onto a specified set of sub-facets (Rafferty & Griffin, 2004). Additionally, transformational leadership may not differentiate from other forms of leadership, such as contingent reward leadership (Judge & Piccolo, 2004). The resulting single-factor model improved beyond the original model, $\chi^2(20) = 57.6$ (p=.00), CFI=0.981, RMSEA=0.079. With the exception of the model chi-square, which is notoriously sensitive to sample size (Kline, 2011) these CFA results fall within the good range for model fit indices suggested by Hu and Bentler (1999).

Health consciousness. I then conducted a CFA on the health consciousness questionnaire in SPSS AMOS. I anticipated only one factor to present for this scale as the items are all variations of what it means to be highly aware of health in the workplace. The initial CFA revealed that several items were negatively impacting model fit due to poor item loadings. Items 1, 3, and 7 all showed squared multiple correlations below .5, again suggesting these item factors

explain less than 50% of the variance of the items (Kline, 2011). After removing the items, the new CFA model showed good fit with the data, $\chi^2(2)= 2.08$ (p=.35); RMSEA = .01; CFI = 1.0.

Coworker support. I expected the CFA for coworker support to reveal a single factor, in line with previous research (e.g., Halbesleben & Wheeler 2012). The CFA demonstrated relatively poor fit with the data, $\chi^2(2)= 33.85$ (p=.00); RMSEA = .231; CFI = 0.950. However, all items had good squared multiple correlation values and regression estimates. But due to low variance within the items, the model did not fit well, and thus should be interpreted with caution. See table 1 for the factor loadings of the independent variables described above.

Presentee attitudes and intentions. After running CFAs on the predictors of the model, I then put the researcher-created dependent variable scales (i.e., presenteeism attitudes and intentions) through the same process (see Table 2). When running the initial CFA on presentee attitudes, items 2, 5, and 7 showed sub-optimal squared multiple correlations (i.e., below 0.5) and were removed. After cutting the items, the CFA model fit was improved, $\chi^2(2)= 11.26$ (p=.00); RMSEA = .13; CFI = .978. These results fell within the moderate range suggested by Hu and Bentler (1999). For presentee intentions, the initial CFA showed results with limited interpretability, $\chi^2(0)= .000$ (p=N/A); RMSEA = .635; CFI = 1.0. However, all three items in the scale demonstrated high standardized regression weights and good squared multiple correlations. This was offset by very low variance within items, suggesting the results be interpreted cautiously.

Results

The descriptive statistics (e.g., means, standard deviations, and sample size), alpha reliability estimates, and intercorrelation matrix are included in Table 3. All scale reliabilities were above .80, indicating that the intrascale reliabilities were adequate (George & Mallery,

2003). However, both measures of leadership, OHSTL and traditional transformational leadership, had reliabilities above .95, suggesting that the items demonstrate exceptional variance attributable to the true score (DeVellis, 2012).

Due to the low response rate in time 2 of the study, I also ran a paired samples t-test in order to examine whether there were population differences between those who participated in the first phase and the second phase. I found significant differences between participants who responded to the survey in time 1 and those who responded in time 2 with respect to the independent variable health consciousness ($t(72) = 2.81$, $p = 0.01$). Specifically, participants in time 2 reported higher health consciousness than participants in time 1. Therefore, results should be interpreted with caution due to the evident population differences.

Control Variables

I investigated if using absenteeism, replaceability, job type (salary vs. hourly), and chronic health condition as control variables would be appropriate for the study by following the suggestions of Bernerth and Aguinis (2016), who suggest that researchers only include control variables for theoretical reasons and only include controls that can be measured reliably. Additionally, Spector and Brannick (2011) suggest removing controls that do not significantly relate to study criterion variables. I ran all of my analyses with and without the controls and found that only chronic health condition had a significant positive effect on presenteeism. Additionally, I found that only replaceability had a significant negative effect when predicting the presentee attitudes and intentions criteria. I removed all of the controls that were not significantly related to the criteria and kept the two mentioned above (e.g., chronic health condition and replaceability) for theoretical reasons, even though they did not affect the relationships under study. For example, even when I controlled for chronic health condition, the

relationship between OHSTL and presenteeism was still significant. Thus, for analyses examining presenteeism (i.e., number of days attending work while sick), I report findings with chronic health condition as a control. For analyses examining presentee attitudes and intentions, I report findings with only replaceability as a control for the sake of parsimony, as the other controls did not relate to the criterion variables.

Convergent Validity

Prior to testing convergent validity, I checked the test-retest correlation for OHSTL in order to provide a test of reliability. The relationship between OHSTL (T1) and OHSTL (T2) was positive and marginally significant, (r= .205; p= .10). This relationship somewhat helps to establish reliability of the OHSTL measure, a key prerequisite of validity. Prior to hypothesis testing, I assessed the convergent and discriminant validity of the new OHSTL scale (Hinkin, 1998). In order to establish convergent validity, overlap in variance must be demonstrated between one scale and alternative measures of the same construct (Campbell & Fiske, 1959). Thus, I examined the correlation of the OHSTL scale with the Carless, Wearing, and Mann's (2000) 7-item Global Transformational Leadership scale. The scales were positively correlated (r=.65, p<.001), which suggests that the constructs are related but not overlapping entirely. This supports the convergent validity of the OHSTL measure with the general transformational leadership measure.

Discriminant Validity

In order to test discriminant validity of the OHSTL measure, I compared the correlations between both OHSTL and traditional transformational leadership (Carless, Wearing, & Mann, 2000) with the presenteeism scales (e.g., quantitative presenteeism, presenteeism attitudes, and presenteeism intentions). Discriminant validity seeks to differentiate one predictor from another,

in this case, differentiating OHSTL from traditional transformational leadership. I expected that the OHSTL-presenteeism relationship would be stronger than the traditional transformational leadership-presenteeism relationship. Using the Hotelling-Williams test for correlations between correlated variables (Williams, 1959), I found that presenteeism (T2) was not more strongly related to OHSTL (T1) (r = -.025) than traditional transformational leadership (r = -.016), t(59) = -0.082 (p = .93, *ns*). Presenteeism (T1) was also not more strongly related to OHSTL (T1) (r = .065) than traditional transformational leadership (r = .034), t(264) = 0.599 (p = .55, *ns*). I also found that presentee attitudes (T2) was not more strongly related to OHSTL (T1) (r = .118) than traditional transformational leadership (r = 0.04), t(59) = .717 (p = .48, *ns*). However, presentee attitudes (T1) was more strongly related to OHSTL (T1) (r= 0.124) than traditional transformational leadership (r = -0.047), t(264) = 3.37 (p < .001). Additionally, I found that presentee intentions (T2) was not more strongly related to OHSTL (T1) (r = .097) than traditional transformational leadership (r = 0.028), t(60) = 0.64 (p = .53, *ns*). However, presentee intentions (T1) was more strongly related to traditional transformational leadership (r = -.122) than OHSTL (r = -0.028), t(264) = 1.83 (p = .07).

The results of the discriminant validity tests show that only the OHSTL (T1) – presentee attitudes (T1) relationship was stronger than transformational leadership, although the sign of the relationship was in the opposite direction predicted (positive instead of negative). Furthermore, the results suggest that the transformational leadership – presentee intentions (T1) relationship was stronger than the OHSTL (T1) – presentee intentions (T1) relationship. Despite most of the analyses trending toward a stronger relationship between OHSTL and the presentee criteria – albeit in a generally positive instead of negative direction – the findings were mostly insignificant. Therefore, the primary goal of differentiating OHSTL from transformational

leadership was unsuccessful. Thus, these tests do not provide adequate support for the discriminant validity of OHSTL.

Hypothesized Analyses

Originally, I intended to focus my analyses on the cross-lagged (T1-T2) relationships. However, due to the low T2 sample size, I also tested cross-sectional analyses using T1 only. To test hypothesis 1, that OHSTL is negatively related to presenteeism, I ran Pearson correlations and examined the cross-lagged correlations as suggested by Rosenthal and Rosnow (1991). I first examined the correlation between OHSTL (T1) and presenteeism (T2) and found that the relationship was not significant (r= -.025; p= .85, *ns*). The relationship between OHSTL (T2) and presenteeism (T1) was also not significant (r=.119; p= 0.36, *ns*). Additionally, the relationship between OHSTL (T1) and presenteeism (T1) was not significant (r=.065; p= 0.85, *ns*). This pattern does not support the notion that there may be some causal effect between OHSTL and presenteeism (Rosenthal & Rosnow, 1991). In fact, it suggests that there is no relationship between OHSTL and presenteeism.

I next tested hypothesis 1 using the alternative presentee criteria. That is, I examined the relationships between OHSTL and presentee attitudes and presentee intentions. The relationship between OHSTL (T1) and presentee attitudes (T2) was not significant (r=.118; p=.357, *ns*). The relationship between OHSTL (T2) and presentee attitudes (T1) was not significant (r= -.01; p= 0.97, *ns*). However, the relationship between OHSTL (T1) and presentee attitudes (T1) was positive and significant (r=.124; p = 0.04). The relationship between OHSTL (T1) and presentee intentions (T2) was not significant (r=.097; p=.45, *ns*). The relationship between OHSTL (T2) and presentee intentions (T1) was not significant (r= .045; p= 0.73, *ns*). The relationship between OHSTL (T1) and presentee intentions (T1) was also not significant (r= -.028; p = 0.65, *ns*). With

the exception of the positive and significant relationship between OHSTL (T1) and presentee attitudes (T1), the results for nearly all presenteeism criteria were not significant, and thus hypothesis 1 was not supported.

I also examined whether OHSTL (T1) incrementally predicted presenteeism (T2), as well as presentee attitudes (T2) and presentee intentions (T2), beyond traditional transformational leadership. However, regression analyses of all 3 cross-lagged models (see Tables 4, 6, & 8), demonstrated that OHSTL (T1) did not add predictive value beyond traditional transformational leadership. Specifically, for the analysis of presenteeism (T2) regressed on the control variable, chronic health condition, in the first step, transformational leadership in the second step, and OHSTL (T1) in the third step, I did not find support for OHSTL (T1) (b= -0.045, p = 0.78, *ns*) predicting beyond transformational leadership (b= -0.021, p = 0.87, *ns*). In the model in which presentee attitudes (T2) was regressed on the control variable, replaceability, in the first step, transformational leadership in the second step, and OHSTL (T1) in the third step, I did not find support for OHSTL (T1) (b= 0.125, p = 0.46, *ns*) predicting beyond transformational leadership (b= -0.046, p = 0.72, *ns*). Finally, in the model in which presentee intentions (T2) was regressed on the control variable replaceability in the first step, transformational leadership in the second step, and OHSTL (T1) in the third step, I did not find support for OHSTL (T1) (b=0.102, p = 0.60, *ns*) predicting beyond transformational leadership (b=0.034, p = 0.79, *ns*).

I then conducted the same analyses using cross-sectional (T1), data only. Neither OHSTL (b= 0.070, p = 0.39, *ns*) nor transformational leadership (b= 0.034, p = 0.59, *ns*) was significantly associated with presenteeism (see Table 5). However, OHSTL (b=0.225, p = 0.004) did add incremental variance beyond transformational leadership (b= -0.039, p = 0.51) when predicting presentee attitudes (see Table 7), although the relationship was positive instead of negative as

predicted. Lastly, I found that OHSTL (b=0.048, p = 0.54, *ns*) did not add incremental variance beyond transformational leadership (b= -0.114, p = 0.06) when predicting presentee intentions (see Table 9).

For hypothesis 2, which stated that health consciousness would mediate the relationship between OHSTL and presenteeism, I conducted mediation analyses using Hayes' (2012) PROCESS macro and chronic health condition as a control variable. Additionally, I used the bootstrapping method as suggested by Baron and Kenny (1986). Bootstrapping resamples from the sample data, making it robust against violations of assumptions associated with the theoretical sampling distribution (e.g., requiring normal distributions). The PROCESS model indicated that there was no direct effect (b= -.564, p = .30) or indirect effect (b= .465, 95% CI [-.022, 1.146], *ns*; see Figure 2). Results of mediation analysis using T1 data only (n=266) also revealed no direct effect (b= .318, p = .41, *ns*) or indirect effect (b= .063, 95% CI [-.082, .246], *ns* see Figure 3). Thus, results indicated that there was no mediation between OHSTL and presenteeism through health consciousness.

I then tested H2 using presentee attitudes (T2) as the dependent variable (see Figure 4). The PROCESS model examined whether the relationship between OHSTL (T1) and presentee attitudes (T2) was mediated by health consciousness (T1), and also included replaceability as the control variable. Using PROCCESS model 4, results indicated that there was no direct effect (b= -.018, p = .90), but there was an indirect effect (b= .155, 95% CI [.029, .336]), suggesting full mediation. Next, I tested the same model using variables from T1 only (see Figure 5). The results differed from the split time-point model in that both the direct (b= .189, p = .002), and indirect (b= -.087, 95% CI [-.136, -.045]) effects were significant, but the indirect effect was negative instead of positive. Thus, the mediation results for T1 data were in the predicted direction (i.e.,

that OHSTL is negatively associated with presentee intentions through health consciousness), but the mediation results using T2 presentee attitudes were in the opposite direction.

I next tested H2 using presentee intentions (T2) as the dependent variable (see Figure 6). Using PROCCESS model 4, results indicated that there was no direct effect (b= .021, *p* = .91, *ns*) or indirect effect (b= .099, 95% CI [-.052, .285]). I then tested this model using variables from T1 only (see Figure 7). The results indicated that there was no significant direct effect (b= -.014, *p* = .86, *ns*) or indirect effect (b= -.042, 95% CI [-.090, .001]). Thus, the results provided no evidence to support mediation. In sum, the results for hypothesis 2 were equivocal, as there were mixed findings both supporting and – primarily – not supporting H2.

To test hypothesis 3, that coworker support moderates the effect between OHSTL (T1) and presenteeism (T2) such that the effect of OHSTL on presenteeism is augmented when coworkers are supportive, I used moderated regression (see Table 10). The first model included chronic health condition as a control variable. In the second model, I entered OHSTL (T1) and coworker support (T1) as predictors. In the third and final model, I added the interaction term OHSTL*Coworker Support as a predictor of presenteeism (T2). The OHSTL*Coworker Support interaction term was not significant (b = -.01, *p*= .95; *ns*). I also tested this model using variables from T1 only (see Table 11). Again, the interaction term was not significant (b = .104, *p* = 0.11; *ns*). Thus, there was no support for coworker support as a moderator between OHSTL and presenteeism.

In addition to the regression between OHSTL and presenteeism, I also conducted two other alternative regression models, one with presentee attitudes (see Table 12) as the criterion and the other with presentee intentions (see Table 14) as the criterion. The alternative models included replaceability as a control variable. In the first alternative model using presentee

attitudes (T2) as the criterion, I again entered OHSTL (T1) and coworker support (T1) as predictors. In the third and final model, I added the interaction term OHSTL*Coworker Support. Results indicate the interaction term was not significant (b = -.07, *p*= .59, *ns*). Additionally, I tested the presentee attitudes model using cross-sectional T1 data (see Table 13). The results indicated that the interaction term was marginally significant (b= -.104, *p* = .089). The graphical display of the interaction was constructed using the unstandardized regression weights and plotting the X-axis with OHSTL and mapping the moderator variable, coworker support, at low and high levels, as described by Aiken and West (1991; see Figure 10). The graphical display also shows that the interaction patterns follow the predicted direction. That is, that high levels OHSTL along with high levels of coworker support are associated with less favorable attitudes toward presenteeism. These results modestly support coworker support as a moderator of the OHSTL – presentee attitudes relationship.

The second alternative regression was identical to the model previously described, except that presentee intentions (T2) was placed as the outcome variable. In this model, the interaction variable OHSTL*Coworker Support was not significant (b = -.148, *p*= .266, *ns*). I also tested this model using only T1 variables (see Table 15). The results indicated that the interaction term was also not significant (b= -.095, *p* = .123, *ns*). These results also do not support for coworker support as a moderator of the OHSTL – presentee intentions relationship.

In sum, with the exception of marginally significant relationship where OHSTL*Coworker Support was negatively associated with presentee attitudes, the results for hypothesis 3 did not support coworker support as a moderator between OHSTL and the presenteeism criteria. Thus, there was very little support for hypothesis 3.

Post Hoc Analyses

Preventative Health Behaviors. I decided to test my models using another criterion variable, namely preventative health behaviors in order to assess whether OHSTL had a positive impact on employee health behaviors outside of presenteeism. I originally created this measure as an alternative criterion but excluded it from my proposal for the sake of parsimony given the other alternative criteria. I decided to test this model for several reasons. First, although the proposed relationship between OHSTL and presenteeism was not significant, I thought it was possible that employees who attended sick would take action to prevent any spread of illness if they worked for a leader high in OHSTL. Additionally, I considered that the population under study was hourly, which may prevent employees from taking sick leave for various reasons (e.g., no access to sick leave, rent, bills). Therefore, even with a leader high in OHSTL, employees may still attend while ill for extraneous reasons, despite being influenced by a leader that emphasizes health and well-being. Thus, I considered the possibility that leaders high in OHSTL may still influence employees through health consciousness in ways that manifest as preventative health behaviors.

I measured preventative health behaviors with a 6-item researcher developed measure (α (T1) =.85; α (T1) =.81). However, the scale was reduced to 4 items after CFA analysis. In constructing this scale, I considered types of behaviors that employees with a leader high in OHSTL would perform in order to prevent illness in the workplace, thus reducing the probability of presenteeism occurring. I intended this scale to reflect the actions that employees would engage in after internalizing the values a leader high in OHSTL would promote. Thus, preventative health behaviors can be viewed as the real-world application of health consciousness. In theory, subordinates with a leader high in OHSTL will tend to report a higher

frequency of these prevention behaviors. Some sample items are, “I cover my mouth when coughing at work,” and “I wash my hands after using the restroom at work.” I used a 5-point response scale that ranged from 1 “Never” to 5 “Always,” where higher scores indicate greater levels of behaviors intended to prevent illness. All items can be found in Appendix G.

I then conducted a CFA on the preventative health behaviors questionnaire. I anticipated a single factor to present for this scale as each item in the scale refers to a specific health behavior that employees may engage in to prevent the spread of illness. The initial CFA revealed that a few items were hindering the model. Items 3 and 4 were removed due to low squared multiple correlation values. The following CFA model demonstrated good fit with the data, $\chi^2(2)= 0.68$ (p=.71); RMSEA = .00; CFI = 1.0.

I then retested my hypotheses using preventative health behaviors as the outcome variable instead of presenteeism. For hypothesis 1, I first tested whether OHSTL (T1) was positively associated with preventative health behaviors (T2). The correlation modestly supports this prediction (r = .22, p = .09). The relationship between OHSTL (T1) and preventative health behaviors (T1) was also significant (r = .13, p = .03). When, assessing whether OSHTL predicted incremental variance over and above traditional transformational leadership, I found that OHSTL does not (b = .203, p = .21, *ns*; see Table 16). I found similar results when testing the cross-sectional time 1 data (b = -.09, p = .225, *ns*; see Table 17).

I next tested hypotheses 2 and 3, that health consciousness would mediate the relationship between OHSTL and preventative health behaviors and whether coworker support would moderate the relationship between OHSTL and preventative health behaviors, respectively. I first tested the mediation using Hayes’ (2012) PROCESS macro in SPSS, where I examined the model with preventative health behaviors (T2) as the outcome variable, OHSTL (T1) as the focal

predictor, and health consciousness (T1) as the mediating variable. The results indicated that there was a direct effect (b= .151, *p* = .05) but no indirect effect (b= -.033, 95% CI [-.112, .039]) (see Figure 8). These results do not support mediation of the OHSTL-preventative health behaviors relationship through health consciousness. Additionally, I conducted the same analyses using T1 data only. The results indicated that there was no direct effect (b= -.018, *p* = .62; *ns*), but there was an indirect effect (b= .099, 95% CI [.032, .168], see Figure 9). Thus, results using data from only T1 support full mediation of the relationship between OHSTL and preventative health behaviors through health consciousness.

Next, I tested hypothesis 3, that coworker support would moderate the relationship between OHSTL and preventative health behaviors. With preventative health behaviors (T2) as the criterion, I entered OHSTL (T1) and coworker support (T1) as predictors in the first step. In the next step of the regression, I added the interaction term OHSTL*Coworker Support. Results indicate the interaction term was not significant (b = .151, *p* = .23). Thus, there was no moderation effect (see Table 18). Additionally, I tested this model again using only T1 data (see Table 19). Again, the results indicated that the interaction term was not significant (b= -.016, *p* = .79). These results do not support coworker support as a moderator of the OHSTL – preventative health behaviors relationship.

Discussion

Using transformational leadership theory (Bass, 1985), I developed a novel form of leadership, OHSTL, to better understand the relationship between leadership and presenteeism. Much like Barling et al. (2002) who created a safety-specific form of transformational leadership in order to leverage leadership as a way to improve workplace safety, I designed a measure of OHSTL to capture a narrow version of transformational leadership focused on follower health

and well-being to investigate whether leadership can be leveraged to improve subordinate health and well-being. Additionally, I utilized the concept of value formation to explain how leaders high in OHSTL could influence followers' awareness of health and well-being (i.e., health consciousness) in the workplace (e.g., Jung & Avolio, 2000). I anticipated that health consciousness would thus serve as a mediating factor between OHSTL and presenteeism, as employees who internalize values are more likely to engage in behavior in-line with those values (Bono & Judge, 2003). Finally, I expected coworker instrumental support (Beehr et al., 2000) to augment the relationship between OHSTL and presenteeism, as research suggests that coworker support is a vital resource to employees who are sick (Miraglia & Johns, 2016).

To test my hypotheses, I conducted a two time-point, cross-lagged study in order to limit the impact of common method variance artificially inflating my results given that all data were collected via self-report. However, due to low participant retention at T2 (n=82) which limited the power to detect significant relationships, I also tested the hypotheses using only T1 data. Furthermore, I included alternative presenteeism criteria (presentee attitudes and intentions) in order to expand the criterion domain. As presenteeism was measured using a single item scale, the inclusion of presentee attitudes and intentions was intended to offset the possibility of range restriction with the presenteeism scale.

The results of the study, using both the cross-lagged and cross-sectional data, suggest that OHSTL is not related to presenteeism, presentee attitudes, or presentee intentions, with the exception of the cross-sectional analysis where OHSTL was positively associated with presentee attitudes. This suggests that higher levels of OHSTL may be associated with more favorable attitudes toward presenteeism. The results also did not provide support for health consciousness as a mediator of the OHSTL-presenteeism relationship using either cross-lagged or cross-

sectional data. There was also no mediation present when examining the cross-lagged or cross-sectional OHSTL – presentee intentions relationships. The cross-lagged mediation of the relationship between OHSTL and presentee attitudes through health consciousness revealed a significant and positive indirect effect, however cross-sectional mediation analysis revealed a negative indirect effect. Both of these models suggest full mediation through health consciousness. The results did not support coworker support as a moderator of any of the cross-lagged or cross-sectional OHSTL – presentee criteria relationships except one. Specifically, coworker support did moderate the cross-sectional relationship between OHSTL and presentee attitudes such that high levels of both OHSTL and coworker support were associated with less favorable attitudes towards presenteeism.

Lastly, I tested post-hoc alternative hypotheses using preventative health behaviors as the criterion instead of presenteeism. Cross-lagged results and cross-sectional results showed that OHSTL was significantly and positively associated with preventative health behaviors, but did not add incremental variance above and beyond transformational leadership. These findings suggest that leaders high in both OHSTL and transformational leadership influence their followers to engage in sanitary behaviors intended to prevent the spread of illness. Next and using cross-sectional data, I found that health consciousness fully mediated the positive relationship between OHSTL and preventative health behaviors, although the cross-lagged findings indicated only a direct effect and no mediation. Additionally, cross-lagged and cross-sectional analyses suggested that coworker support did not moderate the OHSTL – preventative health behaviors relationship. For a complete overview of all hypothesis testing and results, see Table 20.

To explain the results of the study, I address each hypothesis in order using both theoretical and methodological explanations for the findings. My first hypothesis stated that OHSTL would be negatively related to presenteeism. Although prior research suggests that leadership and presenteeism are related (e.g., Miraglia & Johns, 2016), results were often conflicting. Some studies found a positive relationship between transformational leadership and presenteeism (e.g., Baker-McClearn et al., 2010), while others found a negative relationship (Zwingmann et al., 2014). OHSTL was theorized to improve the health behaviors of followers, which would include reduced presenteeism (negative relationship). However, OHSTL was not significantly related to presenteeism, although the findings trended toward a more positive instead of a negative relationship. One possible explanation for why OHSTL was not related to presenteeism could be that OHSTL is indeed unrelated to presenteeism. Despite the fact that OHSTL was constructed around the notion of promoting the health and well-being of followers, it is also possible that leaders high in OHSTL do not impact presenteeism, as there are many other extraneous factors that have a greater impact (e.g., Johns, 2010).

Even though OHSTL was not related to presenteeism, I did find that OHSTL was positively associated with presentee attitudes when analyzing cross-sectional data. The positive relationship between OHSTL and presentee attitudes is in line with research by Baker-McClearn et al. (2010) who found leadership to be positively related to presenteeism. One reason that OHSTL may be associated with more favorable attitudes toward presenteeism may be that leaders high in OHSTL inspire positive employee attitudes towards themselves, which in turn may inadvertently encourage subordinates to perceive presenteeism favorably (e.g., Miraglia & Johns, 2016). For example, leaders high in OHSTL may provide such a high level of support and care for their subordinates' health and well-being that their followers want to try and reciprocate

by showing up to work regardless of their condition (i.e., they may be sick and decide to work anyway). One way to view this relationship is through social exchange theory (Blau, 1964), which describes the rule of reciprocity, where individuals make sure proper repayment is given for received rewards. Because leaders high in OHSTL provide great levels of support and care for their followers, subordinates may want to follow the rule of reciprocity by working harder for their supervisors to repay them. Thus, it is possible that without explicitly telling employees to take off time when ill, that employees may view presenteeism favorably. This is in line with research suggesting that resources such as rewards and recognition, things which employees would receive from a leader high in OHSTL, stimulate engagement and a desire to reciprocate (Crawford, LePine, & Rich, 2010).

It is also possible that the values instilled by supervisors high in OHSTL may not affect outcomes such as presenteeism as much as other health related variables, such as improved diet or exercise habits. One reason why leaders high in OHSTL may not affect presenteeism as much as other health behaviors may be due to presenteeism's more removed, or peripheral, nature. For example, leaders may bring in packed lunches and take time during the workday to exercise, all of which may directly influence subordinates who may see their supervisor actively engage in these healthy activities. However, when a supervisor is ill, subordinates may not immediately connect that staying home while sick is also a health-promoting behavior. Additionally, when employees become ill, they may not be thinking about how their supervisor recently stayed home while ill instead of coming in to work. Additionally, leaders high in OHSTL may influence followers in other ways, such as teaching their subordinates to work in a more sanitary way, through using more hand sanitizer and being more conscientiousness of their symptoms. Indeed, the post-hoc analysis provides preliminary support for this notion. The post-hoc analyses

revealed that leaders high in OHSTL are associated with increased employee preventative health behaviors (e.g., covering the mouth when coughing, cleaning work surfaces after use) through health consciousness. Thus, leaders high in OHSTL may instill values surrounding health and well-being into their employees (e.g., Bass, 1985), which may influence follower preventative health behavior. However, this should be treated with caution as there were no a priori arguments for this relationship.

Another possibility explaining the lack of relationship between OHSTL and presenteeism is that there are unmeasured factors that are more strongly influencing presenteeism. Even though I included many of the variables traditionally associated with presenteeism (e.g., absenteeism, chronic health condition, replaceability, etc.; Aronsson & Gustafsson, 2005), it is possible that there are other variables impacting presenteeism that were not measured. For example, because the population was comprised of working students, there may be a factor associated with balancing school and work that has a strong influence on presenteeism. Additionally, I did not measure whether the participants had access to sick leave, which also may have a significant impact on presenteeism.

Beyond theory, there may also be methodological issues that could explain the absent relationship between OHSTL and presenteeism. The first possibility concerns the operationalization of the OHSTL measure. Primarily, the OHSTL measure assesses health and well-being quite broadly and does not include items that explicitly state that leaders encourage their subordinates to take off time when sick. Future studies are needed to determine whether OHSTL should include such specific items or remain broad in its scope. My factor analysis results suggested removing an item from the OHSTL scale that addressed when an employee was sick. Specifically, the item stated that, “I can count on my leader to work with me when I am

sick." First, the item does not explicitly state that the supervisor encourages the employee to stay at home. Secondly, the item did not work well in the context of the rest of the items as a whole. It remains unclear whether a specific item addressing presenteeism explicitly would yield different results. Furthermore, I found only modest evidence supporting the construct validity of OHSTL, as there was evidence for convergent but not discriminant validity against traditional transformational leadership. The low relationship between OHSTL (T1) and OHSTL (T2) (r= .205; p= .10) suggests low test-retest reliability. It may then be possible that the OHSTL measure inadequately assesses OHSTL, which may contribute to the lack of findings between OHSTL and presenteeism criteria. Thus, it is possible that with more work on the OHSTL measure that OHSTL could be associated with presenteeism.

The criterion variables also may have substantive issues that may have affected the results. First, presenteeism was measured with a single item based on recall. Although this is the standard for presenteeism research (e.g., Aronsson & Gustafsson, 2005; Miraglia & Johns, 2016), it still suffers from cognitive recall bias (Krosnick, 1999), as well as range restriction to the extent that presenteeism is a low base-rate phenomenon (M (T1) = 2.74; M (T2) = 2.84). Which, indeed, the presenteeism variable did suffer from range restriction. Although the standard deviations are both fairly high (SD (T1) = 2.65; SD (T1) = 3.52), the vast majority of responses for both time points was found between 0 – 3 days reported presentee. To illustrate, 192 out of the 266 responses from T1 ranged from 0-3 days, where 44 out of the 62 responses from T2 ranged from 0-3 days. Thus, it makes sense that the correlation between T1 presenteeism and T2 presenteeism was not significant (r= -0.11, p= 0.39, *ns*). However, I attempted to mitigate these issues by including measures of employee attitudes towards and intentions to engage in presenteeism. I drew from the theory of planned behavior (Ajzen, 1991), which suggests that

attitudes and intentions precede behavior. The cross-sectional relationship between presentee attitudes and presentee intentions was strong ($r = .72$; $p < .001$), which is an important condition to fulfill, as attitudes are viewed as a precursor to intentions. However, the cross-lagged relationship between presentee attitudes and presenteeism was relatively weak ($r = .20$; $p = .12$, *ns*). However, the cross-sectional relationship between attitude toward presenteeism and presenteeism was moderately strong ($r = .25$; $p < .001$). The cross-lagged relationship between presentee intentions and presenteeism was also relatively weak ($r = .27$; $p = .03$). However, the cross-sectional relationship between presentee intentions and presenteeism was moderately strong ($r = .30$; $p < .001$). These relationships are on the low end of acceptable in most literature examining attitudes and intentions towards health behaviors, where relationships typically demonstrate Pearson correlations that are higher ($r = .2 – r = .65$; $M \approx .5$) (Godin & Kok, 1996).

Given that the relationships between presenteeism and both attitudes toward and intentions to engage in presenteeism were lower than would be expected given theory, there may have been methodological issues with the attitudes and intentions scales. The items in the attitudes scale refer to preferences for working rather than taking off sick days. For example, one item reads, “I would rather go to work sick than miss a day.” One issue with this is that employees may not necessarily want to go to work when ill. However, they may opt to go to work for other reasons, such as needing the pay, not being able to get their shift covered, or other extraneous reasons that were not directly assessed in this study. Each of these issues, both theoretical and methodological, warrant reconsideration of the OHSTL measure and alternative criterion measures. However, I believe that it is too early to discard them as some of the analyses yielded useful preliminary information regarding presenteeism.

For hypothesis 2, I expected that leaders high in OHSTL would instill in their subordinates values about health and well-being. I theorized that if leaders high in OHSTL could successfully increase followers' levels of health consciousness, then subordinates may be more likely to also be personally invested in reducing presenteeism (e.g., Bono & Judge, 2003). I thus predicted that health consciousness would mediate the cross-lagged relationship between OHSTL and presenteeism. However, I found no evidence to support the mediation hypothesis. Although the relationship between OHSTL and health consciousness was positive and strong, suggesting that employees of leaders high in OHSTL have greater levels of health consciousness, the results did not support mediation. One possible explanation for the lack of mediation between OHSTL and presenteeism through health consciousness could be that health consciousness does not have as profound of an impact on presenteeism as on other health behaviors. For example, health consciousness may be more likely to predict whether or not employees cover their nose when sneezing or mouth when coughing. Indeed, the correlation between health consciousness and preventative health behaviors is very strong (r= .51, p < .001). The strong relationship could be due to the immediacy of sneezing and coughing, suggesting that health consciousness may be more predictive of direct and immediate health behaviors (e.g., washing hands, covering nose and mouth, and cleaning work stations). Therefore, this preliminary finding suggests that presenteeism may be too peripheral to health consciousness as employees may not be considering the workforce when they are not yet at work.

When testing the cross-lagged and cross-sectional mediation models with presentee intentions as the outcome, I found no support for mediation through health consciousness. However, when testing hypothesis 2 using the cross-lagged mediation model with presentee attitudes as the criterion, results showed full mediation, where OHSTL was positively associated

with presentee attitudes through health consciousness. This suggests that leaders high in OHSTL are positively associated with favorable attitudes towards presenteeism through health consciousness. However, when testing the model using cross-sectional data from time 1, I found that OHSTL had a significant negative effect on presentee attitudes through health consciousness, suggesting another full mediation, but in the predicted direction. Thus, it appears that with greater power to detect meaningful relationships, a result more in line with my predictions is present. That is, employees with leaders high in OHSTL instill in their employees a heightened value of health, and in turn appear to have less favorable attitudes towards presenteeism. However, it is just as likely that the finding could be due to Type I error as the cross-sectional analysis includes far more participants and thus increases power for detection of relationships. The observed negative mediation relationship between OHSTL and presentee attitudes through health consciousness could be that employees high in health consciousness understand that preventing the spread of illness goes beyond simple measures such as covering their mouths or noses and washing their hands. Additionally, they may comprehend that coming into work ill could compromise their fellow coworkers and would thus prefer to not engage in presenteeism. However, the finding of a positive indirect effect using the cross-lagged data suggest that employees high in health consciousness may feel overly confident of their ability to prevent illness from spreading through their keen awareness of when they are about to cough or sneeze as well as frequently cleaning their hands.

One possibility for the contradictory findings between the cross-lagged and cross-sectional mediations between OHSTL and presentee attitudes through health consciousness is that there was a difference in populations responding. Even though the mean and SD for presentee attitudes are nearly identical, a paired sample t-test that showed nearly significant

differences between participants who responded to the survey in T1 and those who responded in T2 with respect to presentee attitudes ($t(62) = -1.40$, $p = 0.15$). Specifically, participants in T2 reported lower levels of presentee attitudes than participants in T1. Although not strictly significant, this result suggests a pattern that may help to inform why the results were contradictory. Because of the contradictory results and possible population differences, I recommend taking caution in interpreting the results for the mediation models between OHSTL and presentee attitudes.

Beyond values generated by leaders and based on prior findings suggesting that coworker support is associated with reduced levels of presenteeism (e.g., Gosselin et al., 2013; Miraglia & Johns, 2016), I predicted in hypothesis 3 that higher levels of coworker support would interact with OHSTL to further augment OHSTL's expected negative relationship with presenteeism. However, coworker support did not moderate the predicted cross-lagged nor the cross-sectional relationships between OHSTL and presenteeism. It could be that employees who are ill are likely to attend work regardless of whether they have a leader high in OHSTL or supportive coworkers.

Coworker support also did not moderate the majority of the relationships between OHSTL and presentee attitudes and intentions. Only one cross-sectional analysis revealed that high levels of OHSTL and high levels of coworker support were marginally associated with less favorable attitudes towards presenteeism. Interestingly, these findings are in line with my predictions, in that the interaction term demonstrates a negative relationship with presentee attitudes. To explain, this interaction suggests that when employees receive instrumental support (i.e., Beehr et al., 2000) from coworkers, OHSTL demonstrates a negative association with presentee attitudes. Thus, it appears as though instrumental support from coworkers may be an element in tamping attitudes towards presenteeism. It may be that although coworker support did

not moderate the OHSTL-presenteeism relationship that coworker support still would augment OHSTL when predicting attitudes toward presenteeism. Although high levels of OHSTL and coworker support are associated with less favorable employee attitudes towards presenteeism, there is still a disconnect between presentee attitudes and the behavior of presenteeism.

Even though employees may have a supervisor high in OHSTL and may also receive coworker support, they may still decide to engage in presenteeism for more pragmatic reasons, such as needing the work hours for money to pay bills or to remain eligible for work benefits. For example, employees with little intention to commit presenteeism may be confronted with missing out on needed money for rent or groceries and thus may still decide to attend work despite supervisor and coworker support. Indeed, only 19% of part-time workers have access to sick leave, which amounts to over forty-eight million workers without access to sick leave (DeRigne, Stoddard-Dare, & Quinn, 2016). This is particularly applicable to this sample, where more than 80% of the participants work part time in hourly positions, as part time work traditionally does not offer paid sick leave and has been found to be associated with greater levels of presenteeism (e.g., Aronsson & Gustafsson, 2005). Thus, it may be possible that employees with supportive coworkers and leaders high in OHSTL would be less likely to attend when ill if they had access to sick leave.

Post-Hoc Discussion

Given the possibility that presenteeism may not be associated with OHSTL, I developed preventative health behaviors to assess if OHSTL impacts employee health behaviors outside of presenteeism. Since OHSTL was not related to presenteeism, and with the majority of the sample being part-time workers who have more favorable attitudes towards presenteeism, I decided to test the cross-lagged and cross-sectional relationships between OHSTL and preventative health

behaviors in a post-hoc analysis. First, I found that OHSTL was significantly and positively associated with preventative health behaviors in both cross-lagged and cross-sectional analyses. I next discovered using cross-lagged analysis that there was a positive and direct but no indirect effect between OHSTL and preventative health behaviors. However, the same analysis using cross-sectional data revealed that health consciousness fully mediated the positive relationship between OHSTL and preventative health behaviors. This finding suggests that employees who have leaders high in OHSTL may engage in more preventative health behaviors (e.g., covering nose when sneezing, washing hands) because of their increased health consciousness. Thus, it appears as though leaders high in OHSTL may influence the values employees hold about health and well-being in the workplace, which is reflected in their behavior at work intended to prevent the spread of illness.

Employees who have a leader high in OHSTL may be more likely to do their best to prevent the spread of illness. Given that the population under study likely does not have access to sick leave (e.g., DeRigne et al., 2016), this finding may demonstrate how OHSTL influences the part-time work population. Though this finding is encouraging, future studies need to theorize and analyze this relationship thoroughly, as it was not hypothesized in this study.

Theoretical Implications

Following prior research by Barling et al. (2002), I set out to create a specific form of leadership that could incrementally predict health behaviors (e.g., presenteeism) beyond traditional forms of leadership. The primary rationale for the development of OHSTL was to reconcile conflicting findings on the relationship between transformational leadership and presenteeism (Miraglia & Johns, 2016). Some research suggests that transformational leadership inspires presenteeism through generating positive attitudes in employees, which encourages them

to attend to while ill (Baker-McClearn et al., 2010). On the other hand, transformational leadership is also associated with improved employee health, resulting in lower rates of presenteeism (Biron & Bamberger, 2012). Thus, I sought to narrow the definition of transformational leadership to focus exclusively on health and well-being to provide clarity on how specific leader behaviors could mitigate presenteeism.

However, my findings demonstrated no relationship between OHSTL and presenteeism. A possible explanation as to why OHSTL was not related to presenteeism could be that while subordinates received care and support from their leader, the participants in this study worked in job positions (i.e., part-time and hourly) that may be more influenced by outside factors (e.g., Aronsson & Gustafsson, 2005; Miraglia & Johns, 2016). Thus, OHSTL may be limited in its application to workers that have access to paid sick leave. However, future studies examining this population need to be conducted before this can be concluded. Although there was no relationship between OHSTL and presenteeism, my study does support that OHSTL is more strongly related to presentee attitudes, as well as general trends toward a positive relationship between OHSTL and presenteeism. Theoretically, this finding is more in line with the findings of Baker-McClearn et al. (2010), in that OHSTL was associated with more favorable attitudes towards presenteeism. It could be that principles of social exchange may be present when employees have a leader high in OHSTL. That is, followers receive care and support from a leader high in OHSTL and may feel that attending while ill is preferable in order to reciprocate.

Despite the results demonstrating no relationship between my measure OHSTL and presenteeism, the construct of OHSTL has potential to positively influence the health and well-being of subordinates. Based on the items in my measure of OHSTL, which focused broadly on health in general, my measure of OHSTL may be better used to inform researchers on more

general health behaviors, such as diet and exercise. Indeed, the measure of OHSTL used in this study may be more generalizable (i.e., work across a diverse array of job types) when predicting diet and exercise. For example, the item "My supervisor's healthy lifestyle motivates me to live healthier" may be interpreted more along the lines of diet and exercise. However, future research will need to be conducted to confirm this relationship. Furthermore, the construct of OHSTL may yet be used to predict presenteeism if the items of the OHSTL scale are altered to explicitly address it (i.e., items where it is clear that leaders are encouraging subordinates to stay home when sick).

One fear of narrowing the focus of pre-existing constructs, like transformational leadership, is that the generalizability of the construct is reduced (e.g., Shadish et al., 2002). However, OHSTL was designed to predict a vast array of health and well-being behaviors enough to justify its existence in the leadership literature. For example, and as noted above, in addition to OHSTL potentially having an impact on presenteeism among a population with paid sick leave, it potentially could be used to theoretically predict other health behaviors, such as exercise and diet improvements. Indeed, the post hoc analyses offer preliminary evidence suggesting that OHSTL may be a better predictor of preventative health behaviors than presenteeism, at least in the current sample. Furthermore, OHSTL may also be used to study health climate within workgroups, as leaders have been shown to influence workgroup climate (e.g., Liao & Chuang, 2007; Zohar & Tenne-Gazit, 2008). Using the theory of transformational leadership, leaders high in OHSTL may influence their followers to internalize values of health and well-being. This is evident in the observed relationship between OHSTL and health consciousness (r=.31; p<.001). When aggregated, a team of employees who all have internalized health and well-being values may demonstrate a profound impact on the health climate of the

workgroup. For example, a team of employees with similar values surrounding health and well-being may all be more inclined to keep their workspaces sanitary as well as encourage each other to live a healthy lifestyle. This may in turn result in improved workgroup efficiency as employees who are healthy are generally more engaged and productive in their work (Demerouti et al., 2009; Hemp, 2004). Thus, when examined at a workgroup level, leaders high in OHSTL may improve the health climate of their workgroup and therefore may be associated with a significant improvement in workgroup productivity. Surprisingly, the relationship between transformational leadership and health consciousness was slightly stronger (r=.34; p<.001) than the relationship between OHSTL and health consciousness. It is possible that traditional transformational leadership also may influence employees to internalize values of health and well-being.

Another theoretically interesting finding of the study was how coworker support moderated the cross-sectional OHSTL – presentee attitudes. This finding suggests that both elements need to be present to establish a negative relationship with presentee attitudes. Theoretically, this is interesting because it may suggest that employees need to receive the values transmitted by their supervisor regarding health and well-being, as well as instrumental support from coworkers in order for them to consider taking off time. This may further hint at the norm of reciprocity, as employees who receive support from a leader high in OHSTL want to repay them with more effort, which may manifest as offering help to fellow coworkers when their peers fall ill. It may also be possible that coworkers decide to come in to work while ill so that they do not have to burden their fellow coworkers by asking for them to cover them. However, employees may be able to reciprocate the recognition and care they receive from their leader by

taking on an extra work burden to help their peers. This may allow those who are ill to take time off to recover, knowing that they can reciprocate when others are ill in the future.

Although social exchange may explain why OHSTL was positively associated with presentee attitudes, the theoretical implications suggest that a lack of paid sick leave is a possible reason why OHSTL showed no association with presenteeism. Furthermore, there is not much empirical evidence supporting the model, and thereby theoretical rationale, proposed. However, this may be due to a few critical reasons. First, the sample under study may have offset OHSTL's potential to have a negative effect on presenteeism. That is, a working student population may not be impacted as strongly by OHSTL as by outside factors. Second, there were measurement and operationalization issues that could also have influenced the results of the study. Thus, more refinement of the measures and further study using a more diverse population (i.e., employees with access to paid sick leave) are required to firmly set OHSTL as a reliable predictor of health behaviors, such as presenteeism in the case of this study.

Practical Implications

The findings of the study suggest that organizations need both leaders high in OHSTL and a supportive coworker group in order to reduce favorable attitudes towards presenteeism. In order to achieve this combination, organizations can train their supervisors to emphasize health and well-being more around their subordinates. Additionally, companies would need to encourage a supportive work environment, where employees are rewarded for providing help to their peers during times of need.

Although leaders high in OHSTL and supportive coworkers may help to mitigate presentee attitudes, they do not appear to mitigate presenteeism. Thus, organizations may need to address more pressing factors, such as incorporating paid sick leave for employees to leverage

when needed (DeRigne et al., 2016). Even though organizations should not depend on supervisors to reduce presenteeism, organizations can still take advantage of leaders high in OHSTL as a way to improve upon workplace health. Indeed, the post-hoc findings suggest that employees with leaders high in OHSTL are more likely to engage in behaviors intended to prevent the spread of illness. Indeed, research shows that good leaders are associated with better health in subordinates (Miraglia & Johns, 2016).

In conjunction with leaders high in OHSTL, my study demonstrates that coworker support is a necessary component in reducing attitudes toward presenteeism. When coworker support is low, employees with high OHSTL leaders indicated more favorable attitudes toward presenteeism. That is, they were more likely to see coming to work while sick as socially acceptable. However, when employees received instrumental support from coworkers, employees with leaders high in OHSTL were less likely to see coming to work while ill as appropriate. Therefore, it is important that organizations promote assisting fellow coworkers when they are in need. Organizations may be able to achieve this through workgroup level encouragement from supervisors and/or HR.

Finally, because supervisors have a more direct effect on employees than do organizations (Maertz Jr., Griffeth, Campbell, & Allen, 2007), my post-hoc analyses suggest that leaders higher in OHSTL may also be more likely to influence subordinates' health habits in the work environment. For example, employees with a leader high in OHSTL may be more likely to cover their mouth when coughing, washing their hands, and keeping work stations clean after use. Each of these behaviors contributes to a more sanitary workplace and may reduce the occurrence of illnesses spreading throughout the workplace. Therefore, workgroups with supervisors high in OHSTL may be more productive, as employees who are preventing the

spread of illness will keep more of the group healthy to perform at higher levels than those who are depleted and feeling less healthy (e.g., Judge & Piccolo, 2004; Kelloway & Barling, 2010; Piccolo & Colquitt, 2006). However, these findings remain post-hoc, and should be interpreted with caution.

Although OHSTL demonstrates the potential to have an impact on the health and well-being of followers as well as overall workgroup productivity, the results of my study do not lend much support to OHSTL being a panacea for presenteeism. Thus, it is important that companies continue to use traditional means to address employee health and well-being while beginning to incorporate leadership as an alternative way to influence employee health. It is my hope that with further refinement and study that OHSTL would be a significant factor in predicting employee health and well-being.

Strengths, Limitations, and Future Directions

There are several strengths of note in this study. First, this is the first known study of its kind to examine a health-specific form of transformational leadership. OHSTL opens the door to research concerning health and well-being of employees as influenced by a direct source (i.e., leaders). Specifically, OHSTL predicted incremental variance in presentee attitudes beyond transformational leadership, albeit opposite the predicted direction. Although there was no relationship between OHSTL and presenteeism, future studies may find OHSTL demonstrates strong relationships with other health criteria. For example, a leader who packs a healthy lunch every day, or consistently takes time to exercise daily may influence subordinates to do the same. Thus, future studies could examine the impact of OHSTL on subordinate diet and exercise. It is possible that employees may increase these behaviors – or are more consistent with them – when under the supervision of a leader high in OHSTL. These changes may ultimately result in

improved health of subordinates, although a longitudinal study would need to be conducted to definitively demonstrate this effect.

Another direction future researchers can take with OHSTL is to enhance the current study by examining a more diverse workforce. Because most participants in my study were hourly employees who worked only part time, I suspect that a different sample, particularly one that contains more salaried employees, and a population where over 70% of workers have access to sick leave (DeRigne et al., 2016), may find different results that may support the original hypothesis that OHSTL is negatively associated with presenteeism. By furthering the understanding of presenteeism and OHSTL, organizations may be more able to better improve workplace health and well-being without sacrificing productivity. In terms of productivity, other research may wish to examine whether OHSTL can influence individual, workgroup, or even firm-level, performance. Because healthier employees are more productive (Hemp, 2004), leaders high in OHSTL may be able to influence overall productivity by ensuring their employees are well-cared for and healthy. Despite the lack of support for the negative OHSTL-presenteeism relationship, this study shows that there is plenty of room to build upon this new area of research.

Beyond the relationship between OHSTL and presenteeism, results from the post-hoc analysis suggest another possible route for future studies. The post-hoc results showed that OHSTL positively influenced preventative health behaviors through health consciousness, possibly suggesting that supervisors influence their followers' health related behaviors by instilling values surrounding health and well-being. This finding is encouraging as it provides initial support for the theoretical underpinning of OHSTL, in that leaders higher in OHSTL contribute to value formation surrounding health and well-being, which in turn was associated

with higher levels of preventative health behaviors. Thus, I believe that future studies can benefit from examining how OHSTL can improve health-related behaviors within the workplace.

Another strength of this study is its cross-lagged design, which collected data at two distinct time points. Cross-lagged designs can provide a more robust understanding of the relationships between variables (Rosenthal & Rosnow, 1991). Although in the context of this study, the two time-point design did not demonstrate any significant relationship between OHSTL and presenteeism. This was also true for most of the cross-lagged relationships between OHSTL and presentee attitudes and intentions, with the exception of the positive relationship between OHSTL and presentee attitudes within the cross-sectional analysis.

Despite these strengths, the study also had limitations. The first limitation is the T2 sample size of 72 participants. Such a low sample in phase-2 of the study had a negative impact on the power of analyses conducted (Cohen, 1977). It may have been beneficial to provide a stronger incentive to participants for participating in the second phase. However, when I assessed the same statistical models using only time 1 data points, I found nearly identical results. There were only three instances where results of hypothesis tests were different from the original tests. The first instance was the cross-sectional positive and significant relationship between OHSTL and presentee attitudes, where there was no relationship in the cross-lagged analysis. Second, the cross-lagged mediation model testing if health consciousness mediated the relationship between OHSTL and presentee attitudes differed from the cross-sectional mediation model. The cross-lagged mediation revealed that OHSTL had a significant and positive indirect effect on presentee attitudes through health consciousness. The cross-sectional mediation model revealed contradictory findings, where there was a significant and positive direct effect between OHSTL and presentee attitudes and a significant and negative indirect effect through health

consciousness. Because of the contradictory nature of these findings, I urge caution when interpreting these results. The final instance where the cross-sectional results differed from the cross-lagged results was the significant and negative moderation effect of coworker support on the OSHTL – presentee attitudes relationship, where the original cross-lagged results showed no moderation effect.

When creating my OHSTL scale, I encountered issues during my factor analysis, posing another limitation to my study. I initially set out to create OHSTL with four distinct subfacets, each based off of the original conceptualization of transformational leadership (Bass, 1985). However, my findings reduced the scale to a single factor, suggesting that the different subfacets were not unique from each other. Despite this, meta-analytic findings show that transformational leadership scales do not consistently load onto a specified set of subfacets (Rafferty & Griffin, 2004). Nevertheless, it is possible that the OHSTL scale not loading onto all four predicted subfacets is a limitation as transformational leadership was intended to present 4 subfacets. Indeed, these issues may be seen in the results, as the construct validity for OHSTL was weak. Additionally, the test-retest reliability of OHSTL demonstrated a very weak relationship. These findings may suggest that the OHSTL scale does not adequately measure OHSTL. Future studies could rework the items, following more closely with traditional transformational leadership scales that load onto four distinct subfacets in order to create a measure containing all four subfacets.

Another limitation is that all data collected were self-report. Although there were two time-points, the lack of multiple sources raises concerns about common method variance (CMV; Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). CMV suggests that within-person ratings can result in artificial inflation in the observed relationships between variables. However,

incorporating multiple time points reduces this issue. Additionally, CMV is not considered as much of a threat to validity as once suggested (Spector, 2006). Specifically, Spector (2006) notes that if CMV is as ubiquitous as it is claimed to be, then all self-report measures should be correlated. However, even among studies with very large populations, many variables do not demonstrate significant correlations. Additionally, social desirability is discussed as another source of artificially inflated relationships, although findings show that social desirability is not as prevalent, nor does it produce more than modest inflation of found relationships in the literature (Spector, 2006). Regardless, certain measures need to be assessed within-person, such as the attitudes towards and intentions to engage in presenteeism scales used in this study. Only individuals under study can inform research of their attitudes and intentions towards behaviors.

Another limitation of the study was the single-item, dependent variable of presenteeism. In line with previous research, I asked participants to recall how many days in the past 6 months they have come into work ill, reported in whole days. Thus, a great deal of weight was placed upon a single-item, recall measure. Furthermore, because absenteeism and presenteeism are not typically high occurrence phenomena, I created the presentee attitudes and intentions measures in an attempt to expand the criterion domain of my study. I created these measures in an attempt to offset the possibility of low variance presented by the presenteeism scale. Low variance can result in range restriction – as occurred with the presenteeism scale – which can diminish the accuracy of results interpretation (Sackett & Yang, 2000). Each of these measures was meant to serve as an alternative to the single-item presenteeism measure. By assessing attitudes and intentions of a specific behavior (i.e., presenteeism), researchers can get closer to predicting actual behaviors (i.e., theory of planned behavior; Beck & Ajzen, 1991). The results of my study support the use of presentee attitudes and intentions as these variables were positively correlated

with presenteeism and at least presentee attitudes was able to substitute for presenteeism in order to reflect the more immediate influence of OHSTL (i.e., attitudes precede behaviors; Ajzen, 1991).

A final limitation to this study concerns the population under study. As most participants were hourly employees with the minimal work experience, it is possible that the effects of OHSTL would not be as strong. This is supported when looking at the effect sizes of the models under study, where the $r^2 = 0.015$ for the proposed theoretical model, suggesting that it only explains 1.5% of the variance within the model. As noted in previous research, other extraneous factors, such as hourly jobs and a lack of benefits (e.g., sick leave), are likely to have the most significant effect on presenteeism (Aronsson et al., 2000; Aronsson & Gustafsson, 2005). Future studies can attempt to obtain a more varied sample, where more salaried employees participate to see if there are certain populations where OHSTL is more likely to have a significant effect on presentee behavior.

Finally, future researchers may also consider how leaders high in OHSTL can offset a negative work culture as it relates to health and well-being. Studying whether leaders high in OHSTL can alleviate negative blowback from coworkers or other supervisors when they are sick and need more time off to recover could help to influence organizational policy to further remove the taboo of taking off time when ill. I hope that the results of this study provide researchers with a solid basis to continue the exploration of OHSTL and also convince organizations to invest more in the development of their leaders to improve the health of employees.

This study sought to create a new measure of transformational leadership, OHSTL, that could negatively associate with presenteeism. Although no relationship between OHSTL and

presenteeism was found, the study still opened new research avenues in the area of presenteeism and workplace health and well-being. Interestingly, when combined with coworker support, OHSTL was associated with less favorable attitudes towards presenteeism, suggesting that employees internalize the values that OHSTLs embody and also seek to assist their peers during times of illness. However, it is possible that due to the hourly work that most participants are employed, they are likely more strongly influence by outside factors. Although strong evidence in support of OHSTL is lacking in this study, I believe that it is too early to dismiss it altogether. It is my hope that future research can shed more light on the presenteeism phenomenon and uncover relationships that may reduce the occurrence of presenteeism in the workplace.

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Tables

Table 1. Unstandardized and Standardized Factor Loadings from Confirmatory Factor Analysis of Independent Variables

Parameter	Standardized	SE	Unstandardized
OHSTL			
OHSTL_ii3	0.891		1.000
OHSTL_ii4	0.877	0.045	0.965
OHSTL_im3	0.889	0.047	1.031
OHSTL_im4	0.856	0.047	0.948
OHSTL_iC2	0.761	0.052	0.850
OHSTL_iC4	0.842	0.050	0.969
OHSTL_iS1	0.832	0.049	0.938
OHSTL_iS2	0.827	0.052	0.983
Health Consciousness			
Health Consciousness 2	0.681		1.000
Health Consciousness 4	0.880	0.097	1.251
Health Consciousness 5	0.910	0.099	1.308
Health Consciousness 6	0.771	0.107	1.241
Coworker Support			
Coworker Support 1	0.766		1.000
Coworker Support 2	0.828	0.076	1.068
Coworker Support 3	0.880	0.076	1.129
Coworker Support 4	0.789	0.080	1.066

Note. OHSTL = Occupational Health Specific Transformational Leadership, SE= standard error. All factor loading estimates are statistically significant at $p < .01$.

Table 2. Unstandardized and Standardized Factor Loadings from Confirmatory Factor Analysis of Dependent Variables

Parameter	Standardized	SE	Unstandardized
Presentee Attitudes			
Presentee Attitudes 1	0.701		1.000
Presentee Attitudes 3	0.770	0.091	0.992
Presentee Attitudes 4	0.801	0.093	1.043
Presentee Attitudes 6	0.717	0.092	0.947
Presentee Intentions			
Presentee Intentions 1	0.874		1.000
Presentee Intentions 2	0.894	0.049	1.046
Presentee Intentions 3	0.966	0.047	1.133
Preventative Health Behaviors (PHB)			
PHB 1	0.949		1.000
PHB 2	0.895	0.042	0.971
PHB 5	0.796	0.045	0.820
PHB 6	0.616	0.066	0.777

Note. SE= standard error. All factor loading estimates are statistically significant at $p < .01$.

Table 3. Descriptive Statistics, Alpha Reliabilities, and Correlation Matrix

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. OHSTL (T1)	3.14	0.98	(.95)														
2. OHSTL (T2)	2.96	0.91	.21	(.94)													
3. Health Consciousness (T1)	4.18	0.68	.31**	.20	(.87)												
4. Health Consciousness (T2)	4.10	0.59	.19	.06	-.10	(.84)											
5. Coworker Support (T1)	3.85	0.82	.30**	.08	.34**	-.15	(.85)										
6. Coworker Support (T2)	3.89	0.63	.04	.14	.05	.48**	-.25*	(.77)									
7. Transformational Leadership (T1)	3.71	0.99	.22**	.14	.34**	.00	.38**	-.12	(.95)								
8. Presenteeism (T1)	2.74	2.65	.07	.12	.05	.06	-.01	.17	.03	(NA)							
9. Presenteeism (T2)	2.84	3.52	-.03	-.09	.22†	-.08	.05	-.02	-.02	-.11	(NA)						
10. Presentee Attitudes (T1)	2.66	0.97	.12*	-.01	-.23**	.01	-.10	.20	-.05	.25**	.20	(.83)					
11. Presentee Attitudes (T2)	2.66	0.95	.12	.31**	.35**	-.05	.10	-.12	.04	-.27*	.26*	-.22†	(.84)				
12. Presentee Intentions (T1)	2.87	1.16	-.03	.05	-.13*	.06	-.21**	.30*	-.12*	.30**	.27*	.72**	-.09	(.94)			
13. Presentee Intentions (T2)	2.79	1.12	.10	-.05	.19	-.08	.13	-.12	.03	-.22†	.38**	-.15	.60**	-.09	(.95)		
14. PHB (T1)	4.60	0.62	.13*	-.15	.51**	-.13	.25**	.01	.29**	.03	.00	-.18**	.02	-.07	-.10	(.85)	
15. PHB (T2)	4.64	0.50	.22†	-.13	-.02	.31**	-.12	.29*	.17	.08	-.05	.06	-.08	.07	-.09	-.04	(.81)

Note. N ranged from 70 (time 2) to 267 (time 1). Numbers in parentheses along the diagonal are estimated (α) reliabilities.

OHSTL = Occupational Health Specific Transformational Leadership. PHB = Preventative Health Behaviors.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 4. Results of Three Step Regression of Time 2 Presenteeism on Transformational Leadership and OHSTL

Variable	Model 1	Model 2	Model 3
Chronic Health Condition	0.32**	0.32**	0.32**
Transformational Leadership		-0.02	0.01
OHSTL			-0.05
R^2	0.103	0.103	0.105
Adjusted R^2	0.088	0.073	0.058
ΔR^2		0.000	0.001

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 5. Results of Three Step Regression of Time 1 Presenteeism on Transformational Leadership and OHSTL

Variable	Model 1	Model 2	Model 3
Chronic Health Condition	0.05	0.05	0.05
Transformational Leadership		0.03	-0.01
OHSTL			0.07
R^2	0.048	0.058	0.079
Adjusted R^2	-0.002	-0.004	-0.005
ΔR^2		0.001	0.003

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 6. Results of Three Step Regression of Time 2 Presentee Attitudes on Transformational Leadership and OHSTL

Variable	Model 1	Model 2	Model 3
Replaceability	-0.18	-0.18	-0.17
Transformational Leadership		0.05	-0.03
OHSTL			0.13
R^2	0.033	0.035	0.044
Adjusted R^2	0.017	0.003	-0.005
ΔR^2		0.002	0.009

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 7. Results of Three Step Regression of Time 1 Presentee Attitudes on Transformational Leadership and OHSTL

Variable	Model 1	Model 2	Model 3
Replaceability	-0.23**	-0.23**	-0.21**
Transformational Leadership		-0.04	-0.19*
OHSTL			0.23**
R^2	0.055	0.056	0.085
Adjusted R^2	0.051	0.049	0.075
ΔR^2		0.002	0.029**

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 8. Results of Three Step Regression of Time 2 Presentee Intentions on Transformational Leadership and OHSTL

Variable	Model 1	Model 2	Model 3
Replaceability	-0.18	-0.18	-0.17
Transformational Leadership		0.03	-0.03
OHSTL			0.10
R^2	0.032	0.033	0.039
Adjusted R^2	0.016	0.001	-0.010
ΔR^2		0.001	0.006

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 9. Results of Three Step Regression of Time 1 Presentee Intentions on Transformational Leadership and OHSTL

Variable	Model 1	Model 2	Model 3
Replaceability	-0.21**	-0.20**	-0.20**
Transformational Leadership		-0.11†	-0.15†
OHSTL			0.05
R^2	0.043	0.056	0.057
Adjusted R^2	0.039	0.049	0.047
ΔR^2		0.013†	0.001

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 10. Results of Three Step Regression of Time 2 Presenteeism on OHSTL, Coworker Support, and Interaction Term OHSTL*Coworker Support

Variable	Model 1	Model 2	Model 3
Chronic Health Condition	0.32**	0.32*	0.32*
OHSTL		-0.05	-0.05
Coworker Support		0.04	0.04
OHSTL*Coworker Support			-0.01
R^2	0.103	0.106	0.106
Adjusted R^2	0.088	0.060	0.043
ΔR^2		0.003	0.000

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 11. Results of Three Step Regression of Time 1 Presenteeism on OHSTL, Coworker Support, and Interaction Term OHSTL*Coworker Support

Variable	Model 1	Model 2	Model 3
Chronic Health Condition	-0.13*	-0.12†	-0.13*
OHSTL		0.05	0.03
Coworker Support		-0.01	0.01
OHSTL*Coworker Support			0.10
R^2	0.026	0.028	0.038
Adjusted R^2	0.018	0.012	0.019
ΔR^2		0.002	0.010

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 12. Results of Three Step Regression of Time 2 Presentee Attitudes on OHSTL, Coworker Support, and Interaction Term OHSTL*Coworker Support

Variable	Model 1	Model 2	Model 3
Replaceability	-0.18	-0.18	-0.17
OHSTL		0.08	0.09
Coworker Support		0.09	0.07
OHSTL*Coworker Support			-0.07
R^2	0.033	0.050	0.055
Adjusted R^2	0.017	0.002	-0.010
ΔR^2		0.017	0.005

Note. *Note*. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 13. Results of Three Step Regression of Time 1 Presentee Attitudes on OHSTL, Coworker Support, and Interaction Term OHSTL*Coworker Support

Variable	Model 1	Model 2	Model 3
Replaceability	-0.23**	-0.22**	-0.21**
OHSTL		0.14*	0.17*
Coworker Support		-0.13*	-0.16*
OHSTL*Coworker Support			-0.10†
R^2	0.055	0.081	0.091
Adjusted R^2	0.051	0.070	0.077
ΔR^2		0.026*	0.010†

Note. *Note*. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 14. Results of Three Step Regression of Time 2 Presentee Intentions on OHSTL, Coworker Support, and Interaction Term OHSTL*Coworker Support

Variable	Model 1	Model 2	Model 3
Replaceability	-0.18	-0.18	-0.17
OHSTL		0.04	0.07
Coworker Support		0.13	0.09
OHSTL*Coworker Support			-0.15
R^2	0.032	0.052	0.073
Adjusted R^2	0.016	0.004	0.009
ΔR^2		0.021	0.020

Note. *Note*. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 15. Results of Three Step Regression of Time 1 Presentee Intentions on OHSTL, Coworker Support, and Interaction Term OHSTL*Coworker Support

Variable	Model 1	Model 2	Model 3
Replaceability	-0.21**	-0.20**	-0.19**
OHSTL		0.02	0.04
Coworker Support		-0.21**	0.23**
OHSTL*Coworker Support			-0.10
R^2	0.043	0.083	0.092
Adjusted R^2	0.039	0.073	0.078
ΔR^2		0.040**	0.008

Note. *Note*. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 16. Results of Three Step Regression of Time 2 Preventative Health Behaviors on Transformational Leadership and OHSTL

Variable	Model 1	Model 2	Model 3
Chronic Health Condition	-0.23†	-0.24†	-0.24†
Transformational Leadership		0.17	0.04
OHSTL			0.20
R^2	0.054	0.083	0.106
Adjusted R^2	0.038	0.052	0.061
ΔR^2		0.029	0.024

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 17. Results of Three Step Regression of Time 1 Preventative Health Behaviors on Transformational Leadership and OHSTL

Variable	Model 1	Model 2	Model 3
Chronic Health Condition	-0.05	-0.06	-0.06
Transformational Leadership		0.29**	0.35**
OHSTL			-0.09
R^2	0.003	0.087	0.092
Adjusted R^2	-0.001	0.080	0.082
ΔR^2		0.084**	0.005

Note. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 18. Results of Three Step Regression of Time 2 Preventative Health Behaviors on OHSTL, Coworker Support, and Interaction Term OHSTL*Coworker Support

Variable	Model 1	Model 2	Model 3
Chronic Health Condition	-0.23†	-0.23†	-0.23†
OHSTL		0.29*	0.26*
Coworker Support		-0.19	-0.16
OHSTL*Coworker Support			0.15
R^2	0.054	0.139	0.160
Adjusted R^2	0.038	0.095	0.102
ΔR^2		0.085†	0.021

Note. *Note*. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 19. Results of Three Step Regression of Time 1 Preventative Health Behaviors on OHSTL, Coworker Support, and Interaction Term OHSTL*Coworker Support

Variable	Model 1	Model 2	Model 3
Chronic Health Condition	-0.05	-0.07	-0.07
OHSTL		0.06	0.06
Coworker Support		0.24**	0.24**
OHSTL*Coworker Support			-0.02
R^2	0.003	0.073	0.073
Adjusted R^2	-0.001	0.062	0.059
ΔR^2		0.070**	0.000

Note. *Note*. All values reported for model variables are standardized coefficients. OHSTL = Occupational Health Specific Transformational Leadership.

† $p < .10$ * $p < .05$ ** $p < .01$

Table 20. Comprehensive Results

Relationship	H1 (T1-T2)	H1 (T1)	H2 (T1-T2)	H2 (T1)	H3 (T1-T2)	H3 (T1)
OHSTL-P	OHSTL-P, *ns*	OHSTL-P, *ns*	Direct (OHSTL-P), *ns* Indirect (OHSTL-HC-P), *ns*	Direct (OHSTL-P), *ns* Indirect (OHSTL-HC-P), *ns*	OHSTL*CS-P, *ns*	OHSTL*CS-P, *ns*
OHSTL-PA	OHSTL-PA, *ns*	OHSTL-PA (+)*	Direct (OHSTL-PA), *ns* Indirect (OHSTL-HC-PA) (+)*	Direct (OHSTL-PA) (+)** Indirect (OHSTL-HC-PA) (-)*	OHSTL*CS-PA, *ns*	OHSTL*CS-PA (-)†
OHSTL-PI	OHSTL-PI, *ns*	OHSTL-PI, *ns*	Direct (OHSTL-PI), *ns* Indirect (OHSTL-HC-PI), *ns*	Direct (OHSTL-PI), *ns* Indirect (OHSTL-HC-PI), *ns*	OHSTL*CS-PI, *ns*	OHSTL*CS-PI, *ns*
OHSTL-PHB	OHSTL-PHB (+)†	OHSTL-PHB (+)*	Direct (OHSTL-PHB) (+)* Indirect (OHSTL-HC-PHB), *ns*	Direct (OHSTL-PHB), *ns* Indirect (OHSTL-HC-PHB) (+)*	OHSTL*CS-PHB, *ns*	OHSTL*CS-PHB, *ns*

Note. N ranged from 63 (T2) to 267 (T1). OHSTL = Occupational Health Specific Transformational Leadership. P = Presenteeism.

PA = Presentee Attitudes. PI = Presentee Intentions. PHB = Preventative Health Behaviors.

OHSTL*CS = Interaction Term OHSTL by Coworker Support.

† $p < .10$ * $p < .05$ ** $p < .01$

Figures

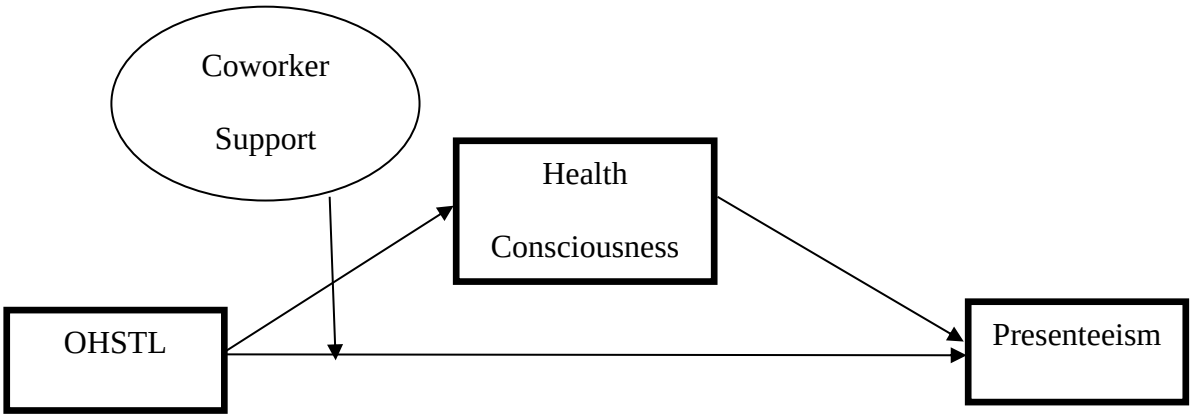

Figure 1. The proposed theoretical model.

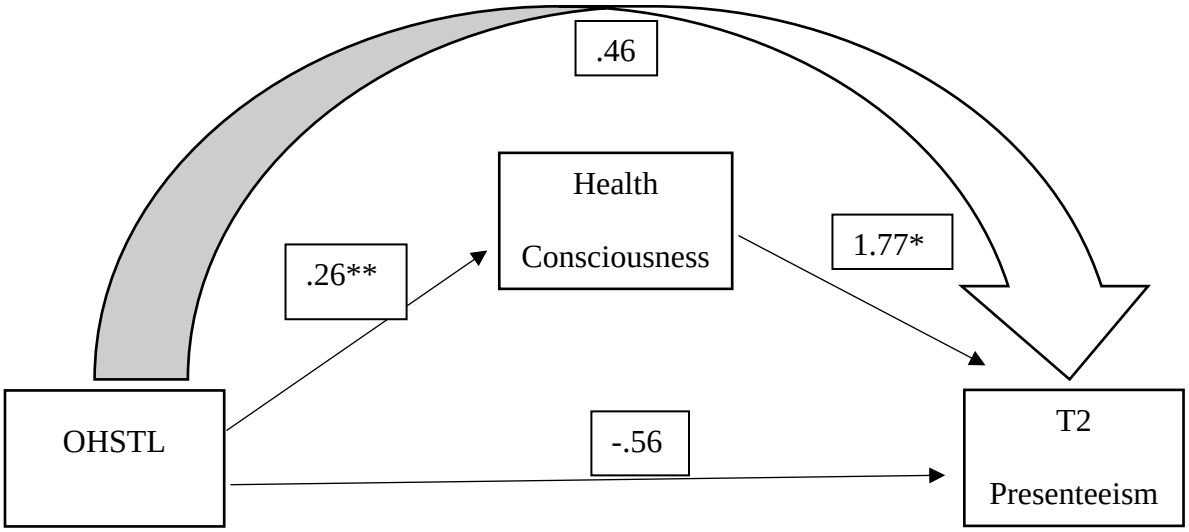

Figure 2. Mediation model of health consciousness mediating the relationship between OHSTL and Time 2 Presenteeism. Testing executed in PROCESS using model 4.

Note: OHSTL=Occupational Health Specific Transformational Leadership. The large curved arrow represents the indirect effect of OHSTL on T2 Presenteeism.

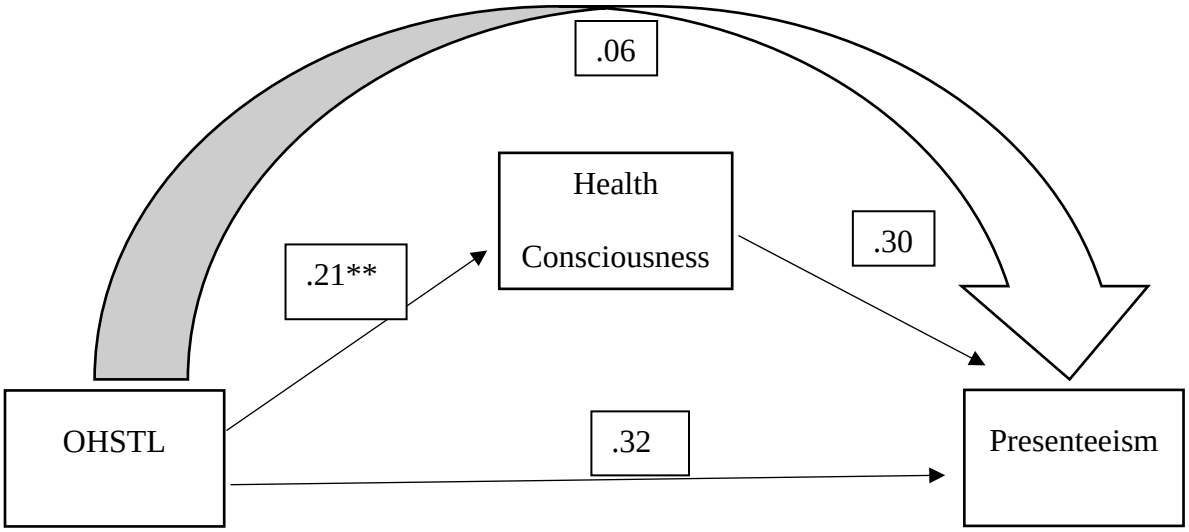

Figure 3. Mediation model of health consciousness mediating the crosss-sectional relationship between OHSTL and Presenteeism. Testing executed in PROCESS using model 4.

Note: OHSTL=Occupational Health Specific Transformational Leadership. The large curved arrow represents the indirect effect of OHSTL on Presenteeism.

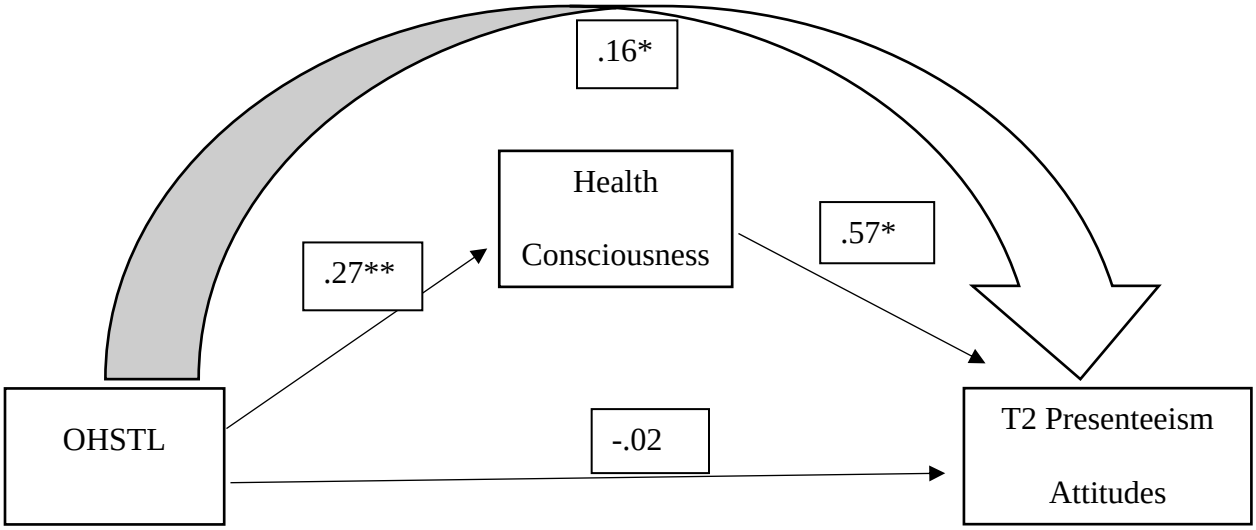

Figure 4. Mediation model of health consciousness mediating the relationship between OHSTL and Time 2 Presentee Attitudes. Testing executed in PROCESS using model 4.

Note: OHSTL=Occupational Health Specific Transformational Leadership. The large curved arrow represents the indirect effect of OHSTL on T2 Presentee Attitudes.

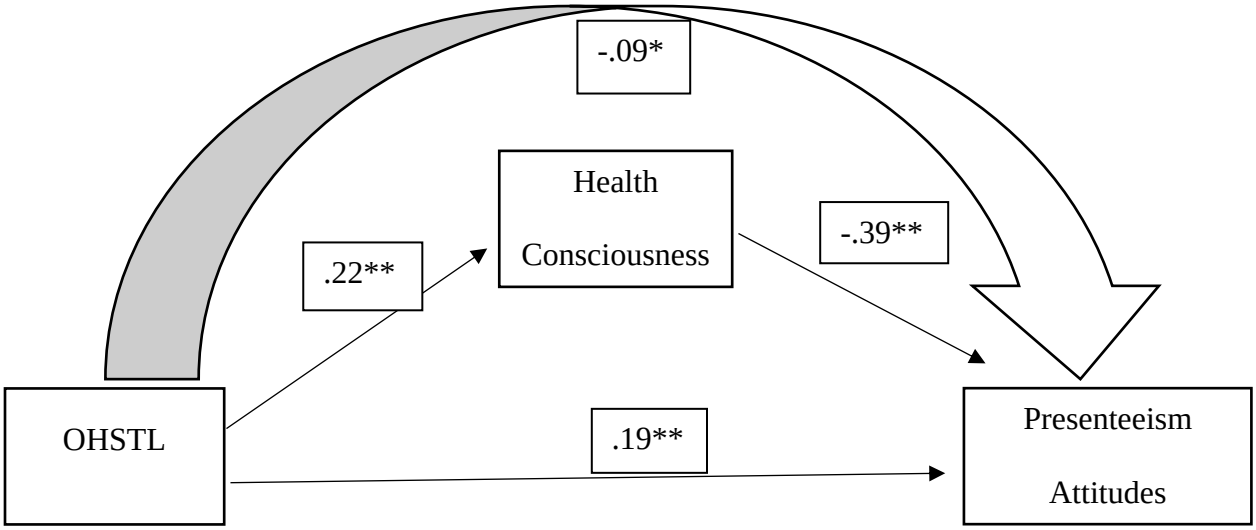

Figure 5. Mediation model of health consciousness mediating the cross-sectional relationship between OHSTL and Presentee Attitudes. Testing executed in PROCESS using model 4.

Note: OHSTL=Occupational Health Specific Transformational Leadership. The large curved arrow represents the indirect effect of OHSTL on Presentee Attitudes.

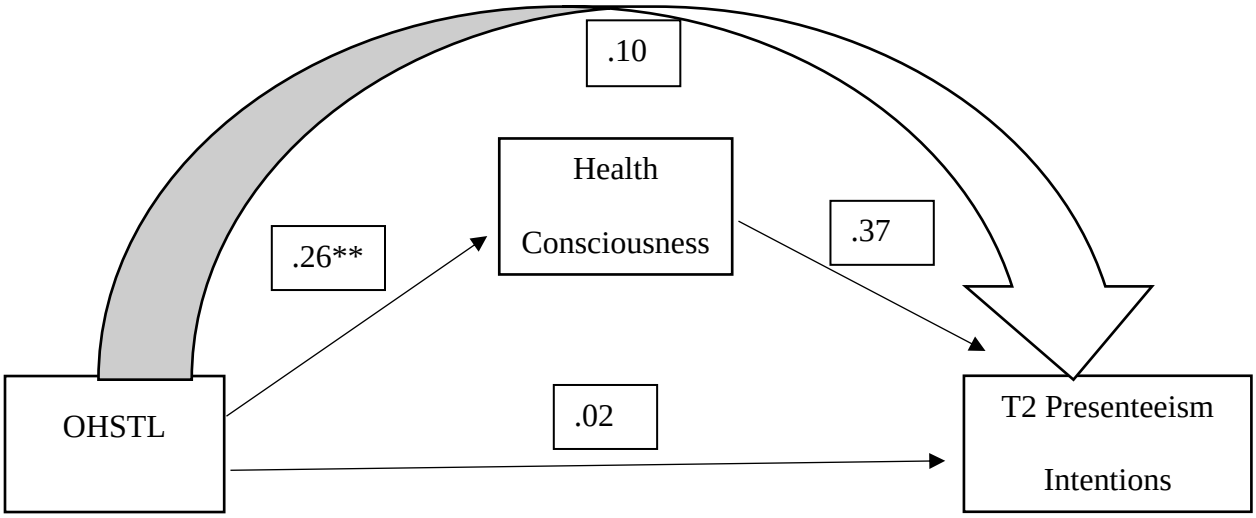

Figure 6. Mediation model of health consciousness mediating the relationship between OHSTL and Time 2 Presentee Intentions. Testing executed in PROCESS using model 4.

Note: OHSTL=Occupational Health Specific Transformational Leadership. The large curved arrow represents the indirect effect of OHSTL on T2 Presentee Intentions.

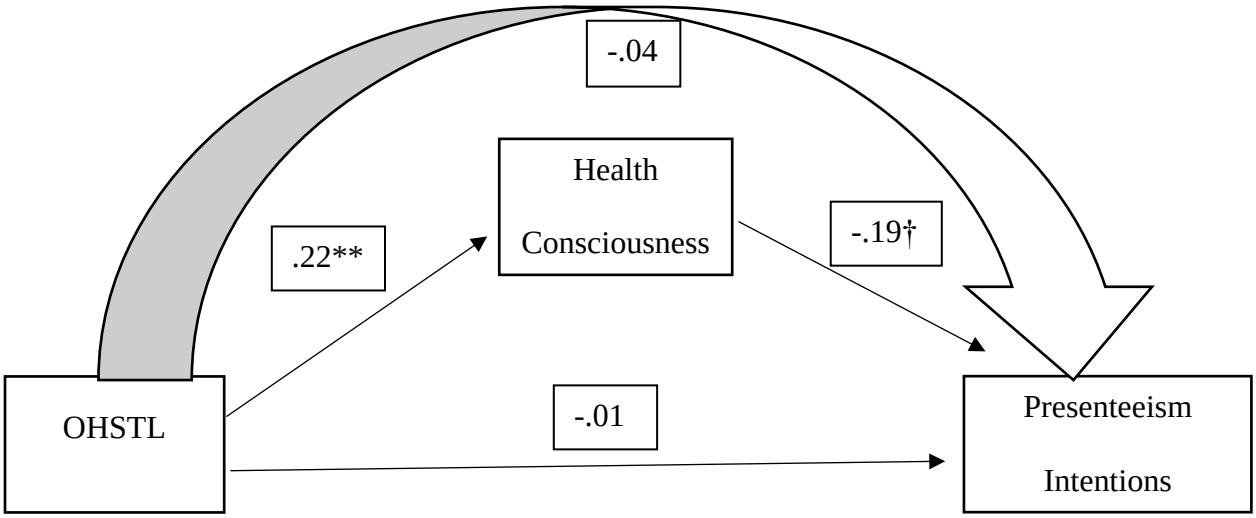

Figure 7. Mediation model of health consciousness mediating the cross-sectional relationship between OHSTL and Presentee Intentions. Testing executed in PROCESS using model 4.

Note: OHSTL=Occupational Health Specific Transformational Leadership. The large curved arrow represents the indirect effect of OHSTL on Presentee Intentions.

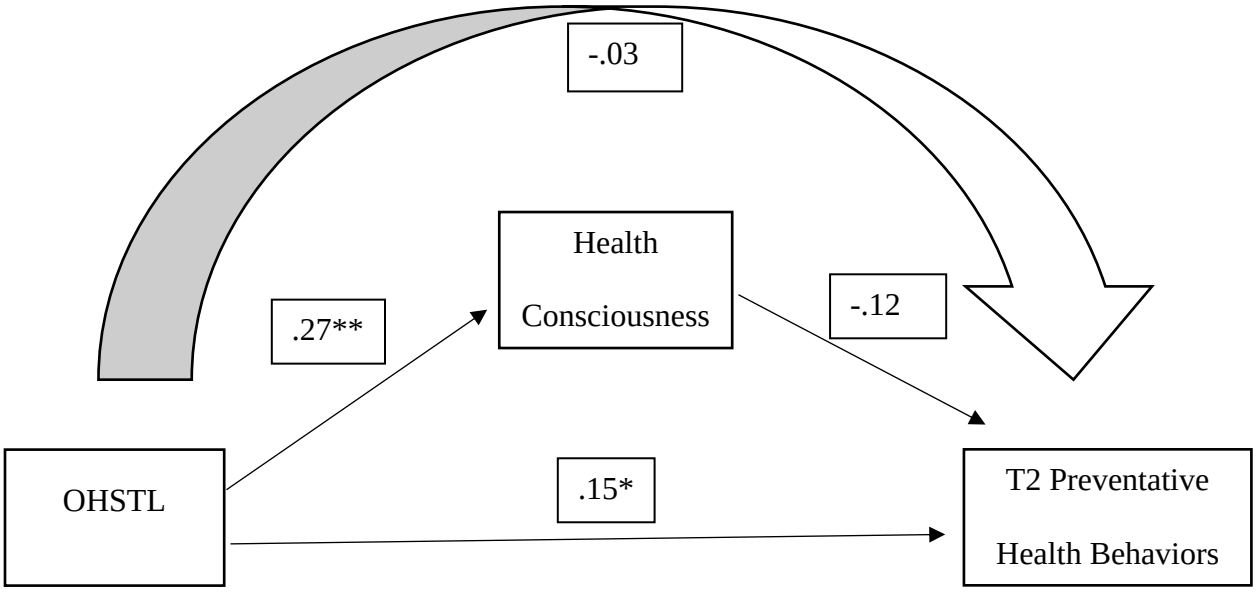

Figure 8. Mediation model of health consciousness mediating the cross-lagged relationship between OHSTL and Preventative Health Behaviors (T2). Testing executed in PROCESS using model 4.

Note: OHSTL=Occupational Health Specific Transformational Leadership. The large curved arrow represents the indirect effect of OHSTL on T2 Preventative Health Behaviors.

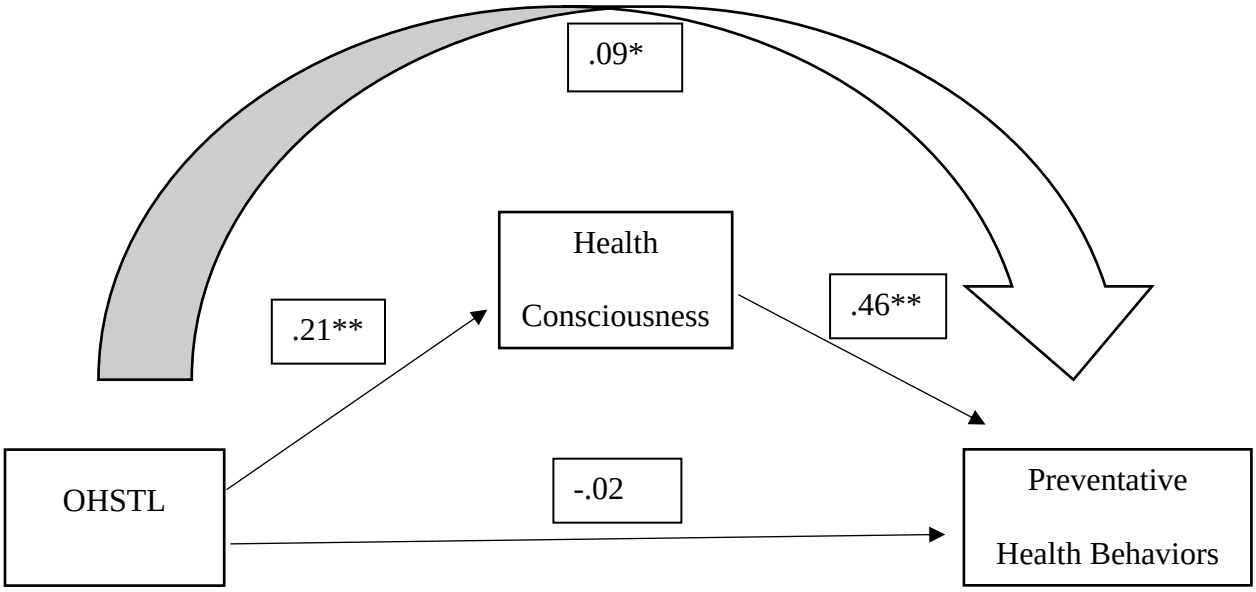

Figure 9. Mediation model of health consciousness mediating the cross-sectional relationship between OHSTL and Preventative Health Behaviors. Testing executed in PROCESS using model 4.

Note: OHSTL=Occupational Health Specific Transformational Leadership. The large curved arrow represents the indirect effect of OHSTL on Preventative Health Behaviors.

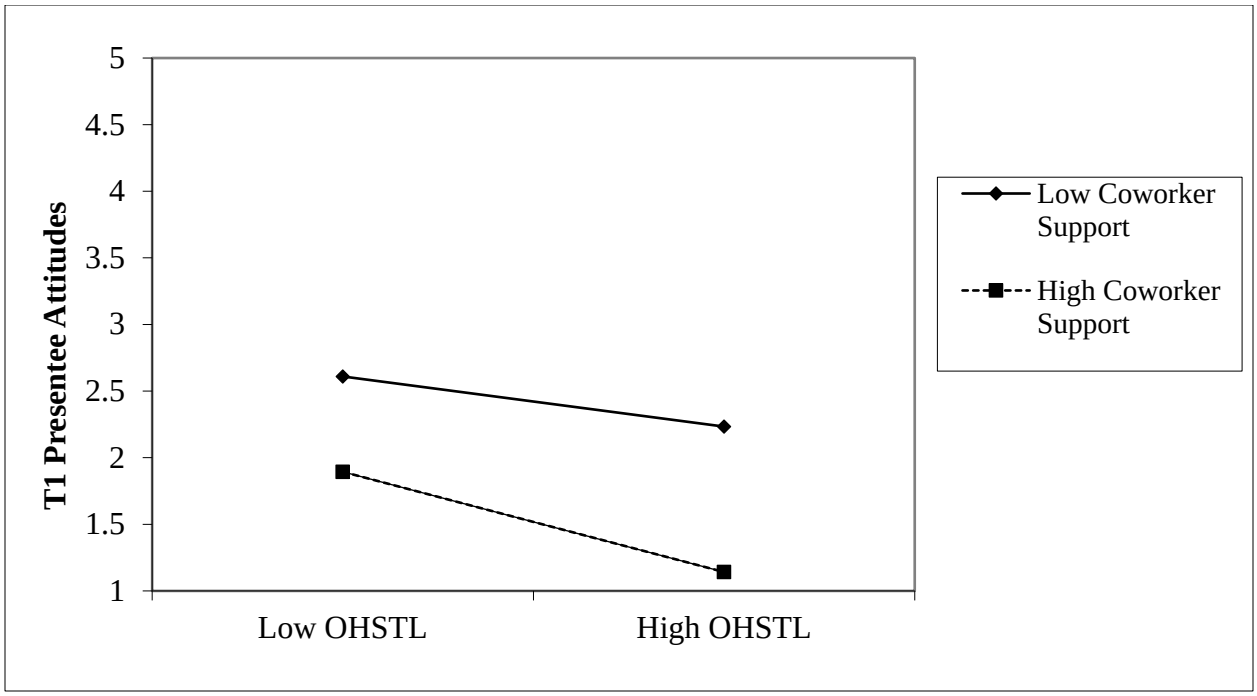

Figure 10. Plot of the interaction between OHSTL (IV) and Coworker Support (moderator) against Time 1 Presentee Attitudes.

Appendices

Appendix A

Occupational Health Specific Transformational Leadership

The following items are designed to assess your perception of your supervisor's attitudes and behaviors surrounding health in the workplace (health is defined as being sanitary in attempts to prevent the spread of illness as well as living a healthy lifestyle and prioritizing general health and well-being). Adapted from Bass (1985) transformational leadership scale. Bolded items reflect those kept after scale reduction analyses.

Idealized influence

1. (1) My leader clearly values health and well-being.
2. (5) My leader practices the healthy lifestyle that s/he preaches.
3. **(9) My leader is an excellent role model when it comes to making health a priority.**
4. **(2_3) My leader's ability to prioritize healthy living is the standard we all strive to obtain.**
5. (2_7) When my leader is sick, s/he takes time away from work to recover and protect others from getting sick.
6. (2_9) Keeping employees healthy is important to my leader.

Inspirational motivation

1. (2) My leader has a passion for making health a priority that s/he transmits to me.
2. (6) My leader has a special gift for seeing ways to improve the overall health of the workplace.
3. **(10) My leader makes everyone around him/her enthusiastic about healthy living.**
4. **(2_4) My supervisor's healthy lifestyle motivates me to live healthier.**

Individualized Consideration

1. (3)I can count on my leader to work with me when I am sick.
2. **(7) My leader gives personal attention to employees who need to take care of their health.**
3. (2_1) My leader encourages me to be honest about when I need to prioritize health before work.
4. **(2_5) My leader helps me to prioritize my health.**

Intellectual stimulation

1. **(4) My leader has provided me with new ways to prioritize my health.**
2. **(8) My leader's ideas about making health a priority have forced me to rethink some of my own ideas about health.**
3. (2_2) My leader's value of health over work has forced me to rethink how I prioritize my own health.
4. (2_6) My leader has given me tips about how to make my health a priority.
5. (2_8) My leader talks about his/her values about the importance of prioritizing health and well-being before work.

Appendix B

Global Transformational Leadership (Carless et al., 2000)

The following items are designed to assess transformational leadership. Scale based on a 1-5 scale, where 1= “Rarely or never” and 5= “Very frequently, if not always.”

1. My leader communicates a clear and positive vision of the future.
2. My leader treats staff as individuals, supports and encourages their development.
3. My leader gives encouragement and recognition to staff.
4. My leader fosters trust, involvement and cooperation among team members.
5. My leader encourages thinking about problems in new ways and questions assumptions.
6. My leader is clear about his/her values and practices what he/she preaches.
7. My leader instills pride and respect in others and inspires me by being highly competent.

Appendix C

Health Consciousness Questionnaire (Novel Scale)

The following items are designed to assess your personal attitudes surrounding health and well-being at work. Bolded items reflect those kept after scale reduction analyses.

1. I make sure that I stay healthy so that I can maintain a healthy work environment.
2. **I am aware of how I am feeling physically before I go into work each day.**
3. I notice how clean work areas are during the workday.
4. **I understand the importance of a healthy work life.**
5. **I understand the importance of a healthy work force.**
6. **I realize that I'm an important part of keeping the workplace healthy.**
7. I quickly notice when others appear to be sick at work.

Appendix D

Presenteeism Attitudes and Intentions

The following items are designed to provide an alternative way in which the presenteeism criterion can be measured or expanded. Presenteeism is the act of showing up to work while ill. Most direct way to assess it is through quantitative measurement of its occurrence (e.g., how many days have you been presentee in the past 6 months?). However, attitudes and intentions may peripherally predict presenteeism and may be used as reasonable substitutes.

In theory, positive attitudes and intentions around presenteeism will be reduced when exposed to leaders high in OHSTL. Because OHSTL operates via developing and instilling values around health in employees, it is reasonable to expect that OHSTL can influence follower attitudes and intentions around presenteeism.

Bolded items reflect those kept after scale reduction analyses.

Attitudes:

1. **I would rather go to work sick than miss a day.**
2. Being sick at work does not hurt my productivity.
3. **I don't think that I'm contagious when I go in to work ill.**
4. **I will not get better any faster by staying home from work when sick.**
5. I have too much to do at work to stay home when I'm sick.
6. **It's not a big deal to go to work when I'm sick.**
7. I'm not worried about getting others sick at work.

Intentions:

1. **The next time that I'm sick, I will still to go to work.**
2. **I don't intend to take a sick day the next time I'm sick.**

3. **The next time I fall ill, I'll still attend work.**

Appendix E

Coworker Support (Adapted from Eisenberger et al., 1986)

1. My coworkers are willing to extend themselves in order to keep me from falling behind if I'm ill. (POS item 10)
2. My coworkers would understand my absence due to a health problem. (POS item 11)
3. Help is available from my coworkers when I am sick. (POS item 8)
4. My coworkers would understand a long absence due to my illness. (POS item 5)

Appendix G

Control Variables

The following items are reflective of the control variables proposed for the study. Those that are bolded were kept and utilized in select analyses (where appropriate).

Absenteeism: How many days of sick leave did you take during the last 6 months?

Pre-existing health condition(s): Please indicate whether you have a chronic health condition (e.g., asthma, allergies, diabetes).

Replaceability: Do you believe that no-one can perform your job but you?

Job type: Indicate whether you are salaried or hourly.

Appendix F

Preventative Health Behaviors

The following items are designed to assess preventative health behaviors. These types of behaviors work to prevent illness in the workplace, thus reducing the probability of presenteeism occurring. In theory, subordinates with a leader high in OHSTL will tend to rate a higher frequency of these prevention behaviors. Scale based on a 1-5 scale, where 1=Never and 5=Always. Bolded items reflect those kept after scale reduction analyses.

1. **I cover my nose when sneezing at work.**
2. **I cover my mouth when coughing at work.**
3. I use hand sanitizer throughout the day at work.
4. I inform my supervisor when I start to feel sick.
5. **I do my best to prevent the spread of illness at work.**
6. **I wash my hands after using the restroom at work.**