

# Let's work out: communication in workplace wellness programs

Wellness  
programs

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## Abstract

**Purpose** – People spend a lot of time communicating with their co-workers each day; however, research has yet to explore how colleagues influence each other's health behaviors. The purpose of this paper is to examine the association between health-related communication and health behaviors among co-workers in a workplace wellness program.

**Design/methodology/approach** – Participants ( $n=169$ ) were recruited from a large south-western university and its local school district through e-mail announcements sent from a wellness administrator. Participants were part of a workplace wellness program that offers several daily group fitness classes, as well as cooking classes, and other educational programs for faculty and staff.

**Findings** – Structural equation modeling was used to examine the association between people's perceived social influence and social support from co-workers, organizational socialization and their health behaviors. Results indicated that perceived social influence from co-workers had an indirect effect on people's health behaviors through their perceived social support from their co-workers, as well as through their organizational socialization.

**Research limitations/implications** – These variables were examined cross-sectionally, meaning that causal relationships and directionality cannot be determined in this study.

**Practical implications** – Co-worker communication and socialization appear to be important factors in understanding individuals' health behaviors; thus, organizations that offer workplace wellness programs should provide opportunities for socialization and co-worker communication to facilitate employees' healthy behaviors.

**Originality/value** – Although the authors only looked at one wellness program and did not examine these variables in programs of varying sizes and types, this study uniquely incorporates interpersonal and organizational communication perspectives in order to give new insight into co-workers' health-related communication.

**Keywords** Workplace wellness, Organizational socialization, Health communication, Co-worker support, Health behaviours, Co-worker influence

**Paper type** Research paper

## Introduction

A staggering 69 percent of US adults are categorized as overweight or obese (Centers for Disease Control and Prevention, 2013; [www.cdc.gov](http://www.cdc.gov)), putting them at risk for comorbidities such as Type 2 diabetes, hypertension, cardiovascular disease and certain cancers (Poirier *et al.*, 2006). At the same time, US adults report working an average of 47 hours per week, with half of all full-time workers indicating that they work more than 40 hours per week (Saad, 2014). People appear to be spending a significant amount of time at work, which could constrain the time they have available to engage in healthy activities (e.g. exercise) and potentially put them at greater risk for developing the aforementioned health issues.

Organizations have begun to recognize their role in this health crisis, which has resulted in greater implementation of workplace wellness programs for employees. In fact, over half of all organizations with 50 or more employees offer some type of wellness program (Mattke *et al.*, 2013). These programs range from focused interventions (e.g. stress management workshop) to comprehensive health and fitness programs (Conrad, 1987;



Parks and Steelman, 2008). In this study, we examine a comprehensive university workplace wellness program that offers a variety of wellness activities such as group exercise, cooking classes, nutrition consultations, body composition analysis and social media information sharing.

According to the social ecological perspective on health promotion, the organizational, group and interpersonal relationships within people's social and physical environment influence their health and well-being (Stokols, 1992). Thus, it is not surprising that workplace wellness programs benefit people's well-being (Nohammer *et al.*, 2013). This study extends this research to identify how co-worker communication is associated with workplace wellness participants' health by examining the association between individuals' perceived health-related social influence and social support from their co-workers, as well as organizational socialization, in conjunction with their diet and exercise behaviors.

### Background

With the prevalence of workplace wellness programs, scholarship has begun to explore organizations' efforts to encourage employees' mental and physical well-being. For example, research has identified a relationship between organizational identification and health behaviors (Dailey and Zhu, 2017; Stephens *et al.*, 2014, 2015), and drawn attention to management's role in promoting health at work (Zoller, 2003). Whereas some organizations implement these programs as a reactionary effort to reduce employee-related expenses stemming from health care costs and lost productivity, other workplaces invest in these programs in order to cultivate a supportive organizational environment focused on employee satisfaction and collegiality among co-workers (Aldana *et al.*, 2005). Although research on workplace programs focuses on organizational outcomes such as illness-related absenteeism (Aldana *et al.*, 2005; Parks and Steelman, 2008), health care costs (Harvey *et al.*, 1993) and job satisfaction (Parks and Steelman, 2008), there is a limited focus on health promotion communication between co-workers.

It would be valuable to extend the current research to examine interpersonal health communication between co-workers, as they likely communicate about their health habits, particularly when they are participating in workplace wellness programs (Conrad, 1987). As an example, employees who participate in such programs might communicate with each other about program offerings and schedules, and share their experiences with each other. Interpersonal relationships have the potential to affect people's health (House *et al.*, 1988), and people are spending a significant amount of time at work (Saad, 2014); therefore, co-workers should not be discounted as potential sources of health promotion. Indeed, the social ecological perspective on health and well-being suggests that health promotion is a function of people's interactions with the individuals, groups, and organizations within their social and physical environment (Stokols, 1992). In other words, health communication is a reflection of the multifaceted nature of human environments (Stokols, 1992), which includes organizations, and more specifically, co-workers.

#### *Perceived co-worker social influence, social support and health behaviors*

Although individuals have a variety of relationship types (i.e. family, friend, romantic, co-worker), most of the research on interpersonal health communication focuses on close relationships (e.g. Burke and Segrin, 2014; Butterfield and Lewis, 2002; Franks *et al.*, 2006; Lewis and Rook, 1999). Within the context of close relationships, research indicates that individuals actively engage in social influence when they want their partners to be healthier (Butterfield and Lewis, 2002) and that such social influence has the potential to stimulate behavior change (Lewis and Rook, 1999). In contrast, research on social influence in the workplace tends to focus on supervisor-subordinate communication, or on the ways in which people try to influence colleagues for the purpose of obtaining personal benefits

(Kraut *et al.*, 1988; Kipnis *et al.*, 1980) rather than on co-workers engaging in health promotion. Nevertheless, this research suggests that co-workers engage in a variety of influence tactics to achieve their goals, including compromise, bargaining, persistence, positive actions or rewards, negative actions, demands, providing a rationale and direct requests (Kraut *et al.*, 1988); these social influence tactics are similar to those used to promote health among people in close relationships (Butterfield and Lewis, 2002). Given research suggesting that social networks are a significant source of health promotion (Southwell *et al.*, 2010), and that co-workers are part of people's broader social networks (Stokols, 1992), it is possible that co-workers would endorse and employ similar interpersonal influence tactics in encouraging health promotion in the workplace. Thus, this study investigates whether individuals' perceived health-related social influence from their co-workers will be associated with their diet and exercise behaviors.

Although the research on health-related influence from co-workers is limited, there is some evidence that co-workers engage in health-related social support. Research evidence suggests that colleagues engage in supportive communication regarding job stress and burnout (Ellis and Miller, 1994; Turner *et al.*, 2010). With regard to workplace wellness programs specifically, best practices guidelines suggest that these programs include leadership, partnership, communication and supportive physical and social environments (Pronk, 2014). This advice is evidenced in one workplace wellness program that provided monitoring and support for employees categorized as high- or moderate-risk for developing serious health conditions (Carter *et al.*, 2011). In order to extend our understanding of supportive communication to a broader social network perspective, this study examines whether individuals' perceived social support from their co-workers will be associated with their diet and exercise behaviors.

Being involved in wellness programs provides co-workers the opportunity to discuss their health (Conrad, 1987), and could also provide them with the opportunity to encourage each other's health-related efforts. For example, co-workers who are involved in wellness programs might be more likely to share healthy exercise or diet tips, praise each other's efforts and encourage each other to attend events or continue with the program. Indeed, evidence from one workplace wellness program suggests that people who perceived greater worksite social support had a higher physical activity score and fruit and vegetable intake compared to individuals with less social support (Tamers *et al.*, 2011). Given the link between social support and health (House *et al.*, 1988), and the aforementioned positive effects of workplace social support on people's well-being, this study investigates whether employees' perceived social support from their co-workers will be related to their diet and exercise behaviors.

Furthermore, according to the meditational model of social control, social influence can influence people's health behaviors through their affect (Okun *et al.*, 2007; Tucker and Anders, 2001). Burke and Segrin (2014) extended this model to demonstrate that individuals' perceived social influence indirectly affects their diet and exercise behaviors through their perceived social support from a romantic partner. It is possible that a parallel pattern could emerge among co-workers. Consequently, this study examines whether employees' perceived social influence from their co-workers will have an indirect effect on their diet and exercise behaviors through their perceived social support from co-workers.

#### *Organizational socialization and health behaviors*

In seeking to understand the associations between co-workers' communication about health and their health behaviors, we must also account for the unique context of the workplace. Thus, we turn to the literature on organizational socialization, which also explains why organizational members may influence others' health behaviors. Scott and Myers (2010) conceptualized organizational socialization as "membership negotiations," or the mutually

implicative relationships between organizational members that influence individuals' participation in organizational functions.

Co-workers are significant sources of employees' socialization (e.g. Barge and Schlueter, 2004; Jablin, 2001; Louis *et al.*, 1983; Ostroff and Kozlowski, 1992). In exploring the various dimensions of socialization, Myers and Oetzel (2003) interviewed employees and identified "familiarity with others" as a central theme of the socialization process. This dimension specifically included "getting to know co-workers, making friends with co-workers, feeling comfortable with co-workers, feeling and expressing a general friendliness, learning how to interact with co-workers [...] [and] deriving emotional support from organizational members" (Myers and Oetzel, 2003, p. 443). In sum, employees who are socialized experience camaraderie and support from the people around them at work.

With the prevalence of workplace wellness programs (Mattke *et al.*, 2013), part of this camaraderie with co-workers may center on conversations about health and wellness. Indeed, through interviewing employees about their perceptions of wellness at work, Farrell and Geist-Martin (2005) found that health "develops through day-to-day communication with others" (p. 575). When employees are familiar with their co-workers, they are likely more influenced by those individuals. Thus, this study investigates individuals' perceived health-related social influence from their co-workers in association with their perceived organizational socialization.

In addition, a great deal of scholarship has linked organizational socialization to positive career outcomes, including career involvement, job satisfaction, organizational commitment and organizational identification (Ashforth and Saks, 1996; Chao *et al.*, 1994). In addition to being more invested in their roles, scholars suggest that socialized employees exceed their job requirements through extra-role or organizational citizenship behaviors (Cooper-Thomas and Anderson, 2006; Saks and Ashforth, 1997). For example, in their study of doctoral student socialization, Slaughter and Zickar (2006) demonstrated that socialization activities, such as involvement with faculty, predicted citizenship behaviors.

In line with the current study, Lambert (2000) proposed participation in work-life benefits as a form of citizenship behavior. Although Lambert (2000) did not specifically look at wellness as a form of citizenship behavior, health behaviors are arguably a form of organizational citizenship. Employees who engage in health behaviors promoted by the organization fall under at least three dimensions of Podsakoff *et al.*'s (2000) typology of citizenship behaviors. First, citizenship behaviors consist of "organizational compliance," or what a "good employee ought to do" (Smith *et al.*, 1983, p. 657). If an organization touts employee wellness, good citizens may observe healthy behaviors. Second, health behaviors go beyond employees' minimal requirements, serving as "individual initiatives," another dimension of citizenship behaviors. Because health behaviors are voluntary in nature, they comprise this dimension of organizational citizenship. Third, health behaviors may be conceptualized as a form of "self-development," another citizenship behavior according to Podsakoff *et al.*'s (2000) typology, because wellness is a step that workers might take to improve their knowledge, skills and abilities (e.g. well-being, productivity, stress) to better contribute to their organizations (George and Jones, 1997). Drawing from this prior theory and research, which highlights a relationship between organizational socialization and organizational citizenship behaviors, this study examines the association between individuals' perceptions of organizational socialization in conjunction with their diet and exercise behaviors.

Furthermore, perceptions of organizational socialization should explain the relationship between individuals' perceived health-related social influence from their co-workers and employees' health behaviors. When socialized employees are more familiar with peers and superiors, they may be more influenced by co-workers to participate in a wellness program

and adapt their health behaviors. Accordingly, this study investigates whether individuals' perceived social influence from their co-workers will have an indirect effect on their diet and exercise behaviors through their perceived organizational socialization.

## Method

Participants in this study included members of an employer-sponsored wellness program for faculty and staff at a large south-western university and its local school district, all of whom participated in the same wellness program. The wellness program was selected because it is offered at the university with which the first two authors are affiliated. This program includes several daily group fitness classes, such as kickboxing, yoga and weightlifting, for faculty and staff at a discounted rate. In addition to on-campus classes, the wellness program sends weekly e-newsletters to participants, offers wellness and body composition checks, and holds monthly information sessions focusing on diet and nutrition.

Following IRB approval, we recruited workplace wellness participants through an announcement that was included in the wellness program e-newsletter that program staff e-mailed to registered program participants each week, as well as through flyers distributed by the authors over one week of group classes. Interested participants accessed the online questionnaire through the link provided in the e-newsletter and flyers. After completing the online questionnaire, participants were directed to a separate questionnaire where they could enter their name and contact information into a raffle for one of two US\$50 visa gift cards. The gift cards were mailed to the winning participants at the end of the study period. Of the 206 people who started the questionnaire, 169 participants (82 percent) completed the questionnaire.

The sample ( $n = 169$ ) consisted of 155 women, 12 men and two people did not report their sex (age  $M = 47.10$ ,  $SD = 10.85$ , range = 26-70 years). The majority of the sample was white (65 percent), 30 percent was Latino/a, 1 percent was Asian/Pacific Islander, 1 percent was African American and 3 percent classified themselves as other. With regard to education, 10 percent reported that high school was the highest level of education completed, 21 percent reported completing some college, 36 percent reported receiving a Bachelor's degree, 28 percent reported receiving a Master's degree, 4 percent reported receiving an advanced graduate degree and 1 percent did not report their highest degree completed. Of college degree recipients, 35 percent reported receiving their degree from the university in this study.

According to the World Health Organization (2016), a normal (i.e. healthy) BMI ranges from 18.50 to 24.99; the average BMI for this sample was 29.29 ( $SD = 6.92$ , range = 19.11-54.79), with 0 percent of participants in the underweight range, 31 percent in the normal range, 32 percent in the overweight range and 37 percent in the obese range. The participants reported being involved in the wellness program for an average of 1.38 years ( $SD = 2.10$ , range = 1 month to 12 years) and participating in the group classes an average of 8.25 times per month ( $SD = 6.02$ , range = 0-31 classes). In total, 37 percent of participants reported attending other health and wellness classes outside of their employer-sponsored programs. Participants reported that an average of 4.78 people ( $SD = 6.65$ , range = 0-50 people) from their department/organizational group also participated in the wellness program. Finally, participants indicated their agreement on a scale from 1 = strongly disagree to 5 = strongly agree concerning their motivations for joining the wellness program: to lose weight ( $M = 3.69$ ,  $SD = 1.14$ ), to improve their health ( $M = 4.38$ ,  $SD = 0.72$ ), to tone muscle ( $M = 4.09$ ,  $SD = 0.99$ ), to be active ( $M = 4.27$ ,  $SD = 0.75$ ) and to spend time with co-workers ( $M = 2.37$ ,  $SD = 1.09$ ).

The online questionnaire assessed perceived social influence, social support, organizational socialization and health behaviors. To measure social influence, we adapted Butterfield and Lewis' (2002) health-related social influence scale. The original scale was used to measure health-related social influence strategies in among couples; this

scale was adapted to measure health-enhancing social influence strategies among co-workers. Participants were asked to indicate the frequency with which they perceived their co-workers to communicate each of the following social influence strategies to encourage them to participate in the workplace wellness program: asked, bargained, guilt, expressed negative emotion, persistence, persuasion, expressed positive emotion, reasoned, stated importance, made suggestions, invoked obligation, told, model, hint and praise. Sample items from this 15-item measure included, “[co-workers] asked you to participate in the wellness program,” “[co-workers] reminded or reinforced previous requests for you to participate in the wellness program” and “[co-workers] modeled the behavior of participating in the wellness program.” The response options ranged from 1 = never to 5 = all of the time. In this study, Cronbach’s  $\alpha$  was = 0.88.

The health-related support measure was adapted from Sallis *et al.*’s (1987) health-related support measure. The original measure assessed diet and exercise support from social network members, but in this study, the health-related support measure was adapted to measure diet and exercise support from co-workers. Sample items from this 10-item measure included, “My co-workers remind me not to eat unhealthy foods,” “My co-workers offer to eat healthy foods with me,” “My co-workers encourage me to stick with my exercise program” and “My co-workers arrange their schedule so we can exercise together.” The response options ranged from 1 = strongly disagree to 5 = strongly agree. In this study, Cronbach’s  $\alpha$  was = 0.91.

The health behaviors measure was adapted from items from Jackson’s (2006) health behaviors scale. In this study the health behaviors measure included 11 items about diet behaviors and seven items about exercise behaviors. Sample items from this 18-item measure included, “how often do you track the nutritional content of the food you eat?” “how often do you choose high fat or high calorie foods over nutritious foods?” (reverse scored), “how often do you participate in sports/athletic activities?” and “how often do you avoid exercise or physical activity?” (reverse scored). The response options ranged from 1 = never to 5 = all of the time. In this study, Cronbach’s  $\alpha$  was = 0.87.

Finally, to measure individuals’ perceptions of organizational socialization, we adapted Chao *et al.*’s (1994) socialization scale. Specifically, we measured socialization by combining three subscales from Chao *et al.* (1994) that captured the extent to which employees had learned about the organization’s politics, history and people. Sample items from this 11-item measure included: “I have learned how things ‘really work’ on the inside of my organization,” “I am familiar with the history of my organization” and “I do not consider any of my co-workers as my friends” (reverse scored). The response options ranged from 1 = strongly disagree to 5 = strongly agree. In this study, Cronbach’s  $\alpha$  was = 0.84.

## Results

The hypotheses were tested using structural equation modeling (SEM) with maximum-likelihood estimation in Mplus (Version 7; Muthén and Muthén, 2012). Compared to path analysis, SEM has the advantage of providing simultaneous estimation of all structural coefficients, their corresponding significance tests, and global tests of the adequacy of the entire model (Jöreskog and Sörbom, 1996). Prior to SEM tests, the variables were screened for skewness and kurtosis. All variables were normally distributed. Moreover, we consulted the variance inflation factor and discovered no problems with multicollinearity. Descriptive statistics and zero-order correlation coefficients are presented in Table I.

Based on the sample size recommendations by Bentler (2006), the present sample size ( $n = 167$ ) was sufficient to test the proposed model including covariates with a  $N:q$  ratio of 5:1 (where  $q$  represents the number of free parameter estimates). The  $N:q$  ratio is considered a good assessment of power because it includes the complexity of the model to be estimated, rather than simply the number of observed/measured variables in the model (Jackson, 2003).

To assess the overall model fit analysis, the maximum-likelihood  $\chi^2$  statistic was used, which serves as a relative measure to evaluate model fit between the retained and alternative models or the nested models using a  $\Delta\chi^2$  test (Kline, 2015). Following the recommendations of good fit by Hu and Bentler (1999), two incremental fit indices were used to evaluate the model fit: the Tucker-Lewis Index (TLI) and the comparative fit index (CFI). Model fit indices of  $> 0.90$  indicate good model fit (Hu and Bentler, 1999). Two absolute fit indices were also examined: a standardized version of the root mean squared residual (SRMR) and the root mean square of approximation (RMSEA), with cut-off values of  $\leq 0.08$  and  $\leq 0.05$ , respectively, which indicate a close model fit (Kline, 2015).

Furthermore, modification indices were used to help evaluate each possible parameter that was not specified in the original theoretical model. Modification indices are usually applied in conjunction with theory to determine whether adding additional paths to the model is defensible (Kline, 2015). A typical procedure is to first remove nonsignificant paths if such deletion is theoretically defensible, and then to add theoretically defensible paths that have large modification indices (Byrne, 2011).

#### *The measurement model*

We followed Hunter and Gerbing's (1988) recommendations in analyzing data by adopting a two-stage process: the measurement model assessment, and the structural model assessment. The measurement model examines whether each item in a scale is a good indicator of an underlying construct. The latent constructs in the model – including social influence, social support, socialization and health behaviors – were measured with multiple indicators that varied from 7 to 10 items. Our initial measurement model with unit-loading indicators to scale latent constructs indicates good model fit:  $\chi^2(104) = 1497.68$ ; CFI = 0.95; TLI = 0.94; SRMR = 0.05 and RMSEA = 0.047 (CI: 0.042, 0.052). Neither of the cross-loadings of one measurement item over multiple constructs nor low factor loadings were found to compromise the overall model fit.

We calculated the reliability and average variance extracted (AVE) for each construct using the formulas proposed by Hair *et al.* (1998). These constructs demonstrated adequate fit, as their reliability scores are higher than 0.70. Discriminant validity was assessed through cross-factor correlations. All of the correlations ranged from  $-0.17$  to  $0.53$  (Table I), which convincingly demonstrates the distinctiveness of the latent constructs in the model (Kline, 2015). Meanwhile, these constructs also showed convergent validity, as each construct's AVE exceeded the 0.5 benchmark. All the loadings on the intended latent constructs were significant and sizable. In sum, the measurement model adequately measured all the latent constructs in the model, and further examination of the structural model was justified.

#### *Tests of the hypothesized conceptual model*

The structural model fits the data:  $\chi^2(119) = 1539.81$ ; CFI = 0.94; TLI = 0.95; SRMR = 0.04 and RMSEA = 0.048 (CI: 0.042, 0.054). Unstandardized regression coefficients for the

Variable	1	2	3	4
1. Social influence				
2. Social support	0.53**			
3. Socialization	0.21**	0.29**		
4. Health behavior	-0.17**	0.05*	0.16*	
<i>M</i>	1.80	2.97	3.67	3.25
<i>SD</i>	0.64	0.90	0.46	0.43

Notes: \* $p \leq 0.05$ ; \*\* $p \leq 0.01$ ; \*\*\* $p \leq 0.001$

**Table I.**  
Summary of bivariate  
correlations among  
main study variables

hypothesized structural relations are reported along with their statistical significance in Figure 1. Individuals' perceived health-related social influence from their co-workers yielded significant positive effects on health-related social support ( $\beta = 0.58, p < 0.001$ ) and organizational socialization ( $\beta = 0.26, p < 0.001$ ), and a significant and negative indirect effect on health behaviors ( $\beta = -0.40, p < 0.01$ ). Additionally, social support was positively related to health behaviors ( $\beta = 0.26, p < 0.05$ ), while organizational socialization was not significantly related to health behaviors ( $\beta = 0.11, p = 0.40$ ).

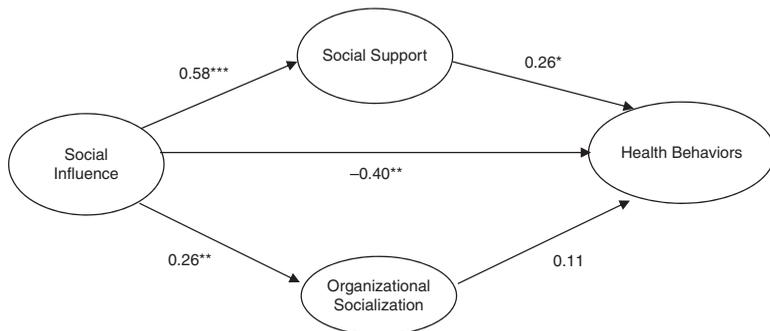
Based on our hypotheses, the model in Figure 1 implicitly assumed partial mediation between co-workers' influence and health behaviors through social support and socialization. Our results indicated that there was a significant indirect effect of co-workers' influence on health behavior through social support from their co-workers; the magnitude of the indirect effect was 0.03 ( $z = 1.91, p < 0.01, 95$  percent BCa CI: 0.016, 0.219). Similarly, there was a significant indirect effect of co-workers' influence on health behavior through their perceived organizational socialization; the magnitude of the indirect effect was 0.51 ( $z = 2.89, p < 0.001, 95$  percent BCa CI: 0.614, 0.620).

The control variables age, gender, length of attending wellness programs and motivations for joining the wellness program were consecutively modeled. All the parameters presented in the final model held true when controlling for these variables. This outcome indicated that the control variables had no influence on the overall findings; thus, we excluded these variables from the final model for reasons of parsimony.

**Discussion**

Research on workplace wellness suggests that these programs can be beneficial to employee health (Tamers *et al.*, 2011), yet current wellness program research neglects co-worker communication surrounding wellness initiatives. Thus, this study employed the social ecological perspective to examine co-worker communication about workplace wellness in order to gain a more comprehensive understanding of health promotion. This study identified an indirect effect of individuals' perceived health-related social influence from co-workers on their health behaviors through their perceived health-related social support from co-workers, as well as through their perceived organizational socialization. Thus, it appears that individuals' perceived health-related communication within the organizational environment, as well as the organizational environment itself, are related to their health behaviors.

With regard to health communication specifically, this study found that as individuals' perceived health-related social influence from their co-workers increased, their perceived health-related social support from their co-workers increased. That is, people feel more



**Figure 1.**  
Structural regression  
model

**Notes:**  $n = 169$ . Significance levels are flagged. \* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$

supported in an environment in which their co-workers engage in health-related social influence. This pattern is reminiscent of research on romantic partners, which suggests that people's health-related social influence and health-related social support are directly related to each other (Burke and Segrin, 2014). Although co-workers might not share the same level of romantic commitment or proclivity toward relationship maintenance that is typical of romantic partners (Canary and Stafford, 1992), on an average day, full-time employees spend more time with their co-workers than their romantic partners. Thus, in line with the social ecological perspective, it appears that people are engaging in health-related communication within a broader swath of their social networks than has been identified previously.

Moreover, this study found that the organizational environment in which co-workers discuss health communication matters. Specifically, individuals' perceived health-related social influence was associated with their organizational socialization. People interact with co-workers in organizational settings and assign meanings to those socialization processes through communication (Weick, 1995), whereby health information is shared and health-related social influence from co-workers is bolstered. In their approach to workplace wellness, Scarduzio and Geist-Martin (2016) suggest that organizational wellness campaigns can promote happiness, gratitude and compassion at work. Likewise, the results from this study show that co-worker social influence regarding wellness is related to employees' perceptions regarding their workplace socialization. In line with Scott and Myers' (2010) theory of membership negotiations, employees come to understand the organization and their roles through interactions with others. Here, this study found that organizational socialization may act as a conduit in nurturing workplace relationships among co-workers that communicate about health and wellness issues in organizations.

With regard to health behaviors, this study found that as individuals' perceived health-related social influence increased, their reports of healthy diet and exercise behaviors decreased. These results illustrate a pattern wherein people might resent health-related social influence communication from others if they perceive that their behavior is being restricted (Rook *et al.*, 1990). In this case, individuals might experience psychological reactance in response to others' communication of social influence (Lewis and Rook, 1999). An alternative perspective that should be considered given the cross-sectional nature of this study is that individuals enacted social influence to encourage their co-workers to be healthier when they believed that their co-workers were unhealthy and needed to improve their health. Nevertheless, social influence can be costly to the extent that it elevates the recipient's negative affect (Okun *et al.*, 2007); therefore, co-workers should be strategic about how they communicate health messages.

In contrast, as individuals' perceived health-related support from their co-workers increased, their reports of healthy diet and exercise behaviors increased. This finding is consistent with research suggesting that perceptions of support from others can be beneficial to people's well-being and can promote physical health (House *et al.*, 1988). The majority of research on health-related support in general (Franks *et al.*, 2006) or diet- and exercise-related support in particular (Burke and Segrin, 2014; Verheijden *et al.*, 2005) focuses on close relationships; however, in line with the social ecological perspective, this research suggests that people's diet and exercise behaviors are also related to their co-workers' communication.

Organizational socialization was not directly related to people's health behaviors, however. Even if employees feel like insiders who belong to an organization promoting health and wellness, they do not automatically practice wellness. As other research demonstrates, workplace wellness program participation is a complex endeavor that requires a multifaceted approach (Scarduzio and Geist-Martin, 2016).

Finally, the results revealed an indirect effect of individuals' perceived health-related social influence from their co-workers on their health behaviors through their perceived

health-related social support from their co-workers. These results are illustrative of the meditational model of social control (Okun *et al.*, 2007; Tucker and Anders, 2001), and reflect a similar pattern identified between romantic partners (Burke and Segrin, 2014). Individuals appear to report enacting healthier diet and exercise behaviors in conjunction with greater perceived health-related social support and social influence from their co-workers. In other words, these distinct, but related, types of co-worker health communication appear to build upon each other to influence individuals' health behaviors.

A parallel finding emerged for organizational socialization. That is, individuals reported engaging in healthier behaviors as they perceived greater organizational socialization, which was associated with their perceived health-related social influence from their co-workers. In line with the social ecological perspective, these findings highlight the importance of organizational socialization when studying co-workers' influence in workplace wellness programs. These findings also echo the reciprocal nature of organizational citizenship behavior (Lambert, 2000), which suggests that socialized employees might engage in health behaviors as a specific form of citizenship behavior. Moreover, engagement in these socialization processes creates a sense of organizational membership or belongingness to a unit-level of co-workers on a daily basis (Kramer and Miller, 2014). Although scholarship suggests a culture of camaraderie and compassion promotes social wellness (Scarduzio and Geist-Martin, 2016), our study demonstrates that the organizational environment is related to physical wellness as well.

Together, these findings are reflective of the social ecological perspective, which suggests that the interpersonal, group and organizational relationships within people's social and physical environment influence their health and well-being (Stokols, 1992). In other words, the interpersonal-level communication and the organizational-level communication about health within people's organizational environment are both related to people's health. By fusing these interpersonal and organizational spheres, this research both illustrated the utility of the social ecological perspective in understanding the interplay between these spheres on people's health, as well as identified the significance of health communication between co-workers in the context of workplace wellness programs.

#### *Practical implications*

In line with the obesity epidemic in the USA, many organizations are taking an active role in workplace wellness. The findings from this study suggest that organizations with wellness programs can capitalize on their initiatives and facilitate employees' healthy behaviors by providing opportunities for co-worker communication and organizational socialization. As workplace wellness members broaden their health communication network to include their co-workers, they gain sources of health-related social influence and support in the workplace, which is valuable given the average amount of time employees spend in the workplace.

In addition to viewing organizations themselves as disseminators of health information (Stephens *et al.*, 2014, 2015), organizational leaders and managers should look beyond top-down efforts to promote wellness and consider how health messages are exchanged on the individual level. Although many organizations, like the one in the current study, publicize wellness programs during orientation and send out e-mails to encourage participation, our study shows that healthy behaviors are largely a function of interactions among employees. Thus, companies should devote more effort into crafting co-worker relationships, perhaps through health mentor programs or specific exercise groups, in addition to the top-down communication (e.g. wellness e-mails or health flyers) that often comprises health information at work.

In order to facilitate health communication among co-workers, managers may also consider creating physical and virtual spaces (e.g. a wall in the office, a social networking page) where co-workers can encourage one another with supportive health messages,

or engage in workplace wellness competitions or activities. This would enable co-workers to communicate, track, and motivate each other with regard to achieving their health goals. In addition, organizations can provide opportunities for conversations about health and wellness through “lunch and learn” sessions or nutritional cooking classes that provide comprehensive wellness information as well as co-worker engagement. Social events such as these would help individuals befriend likeminded colleagues and foster organizational socialization, which offers opportunities to communicate influence, support, and engage in healthier behaviors, and could ultimately be related to co-workers’ perceived collegiality, quality of life, reduced absenteeism (Aldana *et al.*, 2005) and health care costs (Harvey *et al.*, 1993).

### *Limitations and future directions*

Although this study built upon the existing research on workplace wellness programs, as well as health-related social influence in several ways, there are areas where this study could be improved. First, this study was cross-sectional. Although we demonstrated that co-worker influence appears to be related to individuals’ health behaviors, we cannot determine the direction of that association, nor can we determine whether this type of social influence actually precedes healthy behavior change. Future research should examine these variables longitudinally in order to parse out the directionality of these associations.

In addition, this study only involved voluntary workplace wellness participants in one program in a specific geographic location, which limits our ability to extend our findings to workplace wellness programs of varied sizes, types and in different regions. Future research should attempt to study these variables across various workplace wellness programs in different types of organizations in order to gain a more comprehensive understanding of the associations among these variables. Similarly, including voluntary participants vs nonparticipants could have biased our sample given that the majority of these participants likely endorse a healthy lifestyle. It is important to understand how health promotive communication plays out in the organizational context in general, as it could be the most beneficial to people who are not currently involved in workplace wellness.

### **Conclusion**

This study employed the social ecological (Stokols, 1992) and organizational socialization perspectives (Jablin, 2001) to understand the interplay between interpersonal and organizational communication regarding workplace wellness programs and health within an organizational context. Research on workplace wellness programs suggests that they are beneficial to employee health (Tamers *et al.*, 2011), and this study identified the specific co-worker communication processes that are related to their health behaviors. Consistent with previous research, this study found that individuals’ diet and exercise behaviors were related to their perceived health-related social influence (Burke and Segrin, 2014) and social support communication from their co-workers, as well as their organizational socialization. Within the context of workplace wellness programs, co-worker health communication is a salient element of individuals’ health behaviors and warrants additional study.

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