# Using the WEIS-SR to evaluate employee perceptions of their college work environment

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#### Abstract.

**BACKGROUND:** Colleges have been experiencing reduced resource allocations, shifting student expectations, and organizational change. These changes increase employee stress at all levels. Ensuring that employee needs are being met and promoting a healthy and productive workforce has never been more important.

**OBJECTIVE:** To investigate employees' current perceptions of their work environments using the Work Environment Impact Scale-Self Rating (WEIS-SR).

**METHODS:** Full and part time employees on a small college campus in the United States were surveyed using the WEIS-SR through an online survey program to protect their anonymity.

**RESULTS:** Perception of staffing levels, workplace support for a healthy lifestyle, number of supervisors, and personal health ratings contributed to employee perceptions of their work environment. There were also differences between staff, administration, and tenured and non-tenured faculty.

**CONCLUSIONS:** From an occupational performance perspective, valuable information on employees' levels of volition, performance capacity and habituation, and perceptions of their physical and social environment in relation to their work environments was obtained. Further support for the use of the WEIS-SR and psychometric properties of the instrument (reliability and validity) was obtained.

Keywords: Job satisfaction, productivity, work-life balance

#### 1. Introduction

Work can take various forms, including physical labor, cognitive and perceptual processing, problem solving and creative expression [1]. A commonality among all forms of work is how it provides financial compensation to support an individual's daily

existence and meet his or her need for food and shelter [1]. Although this fundamental definition describes work as a financial necessity, it does not explain how work can facilitate an improvement in occupational performance and quality of life. Occupational performance is the ability to carry out activities within the following areas: activities of daily living (ADL), instrumental activities of daily living (IADL), education, work, play, leisure, and social participation [2]. Work, or paid employment, can be a meaningful occupation especially during our adult lives [3]. The work patterns of men and women have been

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studied and results show that regardless of cultural disparities, most adults will spend the majority of their lives at work [1]. For this reason, work can have positive implications on an individual's health or can negatively affect an individual's health (physical, cognitive, psychological, or social) [4].

There are unique components to the work experiences of employees on college campuses and research indicates that these can have negative and positive impacts [5, 6]. College environments are changing across the world and these changes are affecting their employees (academic, staff, administration) [5, 7, 8]. The Center for College Affordability and Productivity provided an overview of these changes in a recent report [7]. College enrollments have been rising, which has resulted in a need for more employees. Colleges are typically hiring more part-time faculty, as well as more full-time staff and administration to meet these needs [7]. Additionally, colleges and universities have increasingly been adopting corporate or business models [6, 8]. Budgetary concerns are moving to the forefront as tuition discounting in United States based institutions and financial aid [bursaries and scholarships] are becoming common practices, particularly at private colleges [9]. In public colleges, tuition freezes can have potential negative results for the schools, as revenues decline and cuts in the numbers of "faculty positions, academic programs, and student services" are becoming increasingly evident [9].

Resource reduction, changing expectations, and increased stress of employees typically results from such organizational changes [6]. Resource reduction can involve budgetary limitations or a lack of previously available resources. Altered expectations can come from a variety of sources, including the "expectations of students who now want to be treated as customers, to those of managers trying to squeeze the most out of their staff" (p. 141–142) [6]. A combination of these factors can result in increased stress [6]. Faculty members have also experienced more stress through increasing peer and student evaluations and assessment of their teaching and research accomplishments, all of which have direct implications for furthering their careers [8].

Specific to the post-secondary education sector, stressors may result from a lack of fit between work demands and working environments. These stressors include promotion systems, salary, supervision, lack of decision-making opportunities, role ambiguity, redundancy, role overload, lack of resources, and time pressures [10]. When these stressors con-

flict with the intrinsic factors of commitment to an individual's job, then job satisfaction decreases [10]. Constant stress in the college workplace, regardless of the source, has potential repercussions in other areas of an employee's life. Research suggests that workrelated stress can result in negative effects at work, outside of work, and in employees' general physical, psychological, and emotional health [11–13]. These negative effects and high levels of stress are reported to be common among individuals employed at a college level, particularly by members of the academic staff [5, 8]. There are implications of higher levels of stress in relation to faculty rank and employment status, particularly for individuals who occupy tenure track appointments [5]. The highest expectations and stress often occur prior to being granted tenure, as faculty are striving to meet certain tenure criteria set forth by the educational institution. Non-tenure track appointments, also called term or contract appointments, may have a primary focus on teaching whereas tenure track faculty also have scholarship/research and service requirements in order to gain job security.

Although the incidence of stress appears to have increased, there are many factors that can act to minimize stress and its resulting effects. The unique experiences of employees on a college campus can counter some of the effects of stress in the workplace. In a study of occupational stress at the university level, "staff [faculty and general staff] reported that support from co-workers and management, recognition and achievement, high morale, and flexible working conditions, helped them to cope with workrelated stress" (p. 66) [12]. Positive relationships with colleagues and/or other employees play an important role in job satisfaction and minimizing stress levels [12, 14]. Additionally, it was reported that some college employees, specifically academic staff, implement their own methods to deal with stressful factors such as personal stress management techniques, setting role boundaries and addressing work-life balance [12].

Faculty and staff members have different experiences in the workplace. There is a lack of substantial research concerning the work experiences of general staff at the college level. It has been reported that general staff members have specific experiences that could counter the effects of stress such as a sense of achievement and recognition related to the successful careers of their college graduates [12]. Research into college campus working environments and the experiences of their employees in relation to current issues and ongoing changes is needed [6].

# 2. Purpose

The purpose of this study was to examine the current experiences of employees on a small US college campus using the Work Environment Impact Scale-Self Rating (WEIS-SR). This self-rating tool examines an individual's perception of their own present work environment and is based on the Model of Human Occupation [15].

#### 3. Materials and methods

#### 3.1. Materials

The revised version of the WEIS, The Work Environment Impact Scale - Self Rating (WEIS-SR) was used for this study. This tool was recently developed by occupational therapists in Sweden, as a modification of the existing Work Environment Impact Scale and is in the early stages of reliability and validity testing [15]. The original Work Environment Impact Scale (WEIS) was developed in the United States and is theoretically grounded in the Model of Human Occupation [16], one of the most frequently used theoretical models of occupational therapy [17]. The WEIS is reported to have adequate construct validity and internal consistency in a US sample [16] and good construct validity, minimal rater bias, and a good ability to discriminate different levels of work environment impact in cross cultural studies [18]. However, the semi-structured interview is lengthy and the scoring relies on clinical judgment and interpretation. To address these issues with clinical utility, a self-rating version was developed by occupational therapists and researchers in Sweden. Thus far, there has been one reliability and validity study conducted with 2 samples of Swedish healthcare workers (Sample 1, N = 45; Sample 2, N = 26) [15]. Results of this study showed good content validity, good test-retest agreement, very good internal consistency, and good clinical utility [15].

This 15-item tool measures personal perceptions of the physical and social work environments. Participants rate items using a 6-point Likert-type scale where 1 = strongly agree, 2 = moderately agree, 3 = neither agree nor disagree, 4 = moderately disagree, 5 = strongly disagree, and 6 = not applicable. The researchers contacted the developers of the WEIS-SR to request permission to use the tool. The primary investigator worked with one of the tool developers to provide feedback on the WEIS-SR after

it was translated from Swedish to English. Minor revisions were made to language and grammar without affecting the content. The tool used for this study, the WEIS-SR-2, incorporated these changes. Demographic data and other aspects of the participants' lives at work were also collected in the survey, but is not part of the WEIS-SR-2.

#### 3.2. Procedures

Participants were recruited from a small college in the northeastern United States. Full and part-time college employees, including faculty, staff, and administrators (N = 1822) were eligible to participate in this study. Student employees and employees who were on leave (medical, family etc.) were not eligible to participate in this study. The survey was conducted through Qualtrics online survey software and participants were not identifiable. A total of 248 employees completed the survey, giving a 13.6% response rate.

Researchers recruited participants through targeted emails and other online methods. Department heads were identified through each department's webpage and use of the college directory. Each department head received an email describing the study with a link to the survey. They were also asked to share information about the study and the link to the survey with their employees, including those who do not have easy access to e-mail or a computer. The researchers posted an announcement on the campus online newsletter, which is distributed via email to all employees. The announcement described the study and included a link to the survey. The initial posting was in the general campus announcements section. However, when the researchers examined responses of staff/administrators versus faculty, there was a lower response from faculty so a second posting was made one week later in the "news for faculty" section. Two weeks after the initial posting, another post was made in the general announcements section. Participants were also recruited through word of mouth as researchers also shared the survey information with their campus connections via email.

# 3.3. Ethical considerations

The study was reviewed and approved by the college human subjects review board on October 8, 2013. The study was designed to be anonymous with minimal risk, and a statement of informed consent was provided.

# 3.4. Data analysis

Data were analyzed using the Statistical Package for Social Sciences version 20 (SPSS v20). Sample characteristics were examined through a descriptive analysis. An exploratory factor analysis (EFA) using principal components analysis and varimax rotation was conducted to estimate factors of the WEIS-SR. The goal of the EFA was to explore how items grouped together into interpretable latent factors. It was important that the factors be interpretable according to the Model of Human Occupation (MoHO) [15] and the fit of the data to the model evaluated. The original constructs of MoHO (performance capacity, habituation, volition, environment) were used by the researchers when conceptualizing potential interrelated test items [17]. Items loading onto each identified factor were reverse scored and averaged to comprise a scale score such that higher scores indicated stronger agreement with (or a higher level of) the factor.

A series of *t*-tests and ANOVAs were conducted to examine F-PCH, P-PSE, and F-V against individual variables. Where appropriate, a Bonferonni post hoc analysis was run to locate the differences. A linear multiple regression analysis was completed to look at impacts of all of the related items on the overarching factors of performance capacity and habituation (F-PCH), physical and social environment (F-PSE), and volition (F-V).

#### 4. Results

# 4.1. Employment information

Participants responded to a variety of questions related to their demographics and employment status. Participants reported their ages based on groups, from 18 to 66+, with a relatively even distribution amongst age groups. Length of employment ranged from less than 6 months (8.3%) to greater than 21 years (19.4%) with the majority of participants having worked at the institution from 6 to 10 years (21.5%). About

half of participants had been in their current position 5 years or less (51.7%). Most participants reported their department was adequately staffed (64.6%), and reported having one direct supervisor (70.7%). The 39 academic and staff departments were distributed across 36 different buildings on the college campus. Additional participant characteristics are reported in Table 1.

#### 4.2. Health status

Health status data of participants are reported in Table 2. Most participants (77.3%) reported their environment supported/promoted a healthy lifestyle.

# 4.3. Exploratory factor analysis

EFA using principal components analysis was conducted using a varimax rotation and resulted in a four component solution which accounted for over 60% of the explained variance. Examination of the items comprising these factors appeared to relate to the original MoHO constructs. However, some items loaded similarly onto two factors. In an effort to produce a more interpretable solution, the researchers looked at each WEIS-SR question individually and came to a consensus about which construct it best represented. The researchers agreed to combine performance capacity and habituation, as many of the items loaded on both. This resulted in three theoretical factors: Performance Capacity and Habituation (F-PCH), Volition (F-V) and Physical and Social Environment (F-PSE). Performance capacity can be defined as the ability to perform an activity and habituation refers to how people organize their actions into patterns and routines [17]. Physical and social environments are external factors that influence an individual's engagement in occupation [17]. Volition can be viewed as the motivation for occupation and personal choice [17]. Inter-item correlations were next examined. A Cronbach alpha coefficient of 0.70 or greater indicates good internal consistency among the items [19]. Performance capacity and habituation

Table 1
Demographic and employment information

Characteristic	haracteristic Percentage of Participants Reporting					
Gender	Male (26.4%)	Female (71.5%)	_			
Position	Staff (65.7%)	Administration (6.6%)	Faculty (26%)			
Status	Full-time (92.6%)	Part-time (7.4%)				
Tenure	Tenure position (65.6%) Already Tenured (72.5%)	Non tenure position (34.4%)				

Table 2					
Health	status				

Health Indicator	Percentage of Participants Reporting					
General Health	Poor (0.4%)	Fair (2.9%)	Good (33.9%)	Very Good (43.8%)	Excellent (18.6%)	
Disability	Total (8.2%)	*Physical (70%)	*Sensory (5%)	*Cognitive (5%)	*Mental Health (20%)	
Physical Activity Level	Not active (35.1%)	Somewhat (35.1%)	Active (17.4%)	Highly (3.3%)		

<sup>\*</sup>Breakdown of the respondents who indicated a disability.

(F- PCH) had an initial  $\alpha$  of 0.555 and volition (F- V) had an initial  $\alpha$  of 0.675. Two items, one from each dimension, were dropped as a result of this process as indicated in Table 1, which also details the final factor solution, and factor descriptions.

# 4.4. Employment related differences

The results for each factor are presented below. Throughout these analyses, there were no significant differences noted between gender, age, length of service, or physical activity rating.

# 4.4.1. Factor-performance capacity and habituation

Differences in F-PCH approach significance (t(59) = 1.89, p < 0.064) between tenure-track and non-tenure track faculty, with the non-tenure track faculty members reporting higher F-PCH levels  $(\Delta M = 0.47)$ . There was a significant difference in F-PCH based on whether or not the department was adequately staffed (t(234) = -6.65, p < 0.01), with those who reported adequate staffing reporting higher F-PCH levels ( $\Delta M = 0.76$ ). Participants who perceived the environment as supporting a healthy lifestyle had significantly higher levels of F-PCH  $(t(65.18) = -5.92, p < 0.01; \Delta M = 0.93)$ . There were significant differences between faculty, staff, and administration (F(2,234) = 14.47, p < 0.01) in F-PCH levels; staff had significantly higher levels than faculty ( $\Delta M = 0.70$ , p < 0.01). There was a significant differences in F-PCH levels based on participants' health (F(3,236) = 3.70, p < 0.05); those who rated their health as "excellent" had significantly higher levels than those who rated their health as "good"  $(\Delta M = 0.49, p < 0.05)$ . Part- time faculty reported significantly higher F-PCH levels than full-time employees  $(t(172) = -2.69, p < 0.01; \Delta M = 0.67)$ .

Together, tenure/non-tenure track ( $\beta = -0.21$ , p = 0.09), adequate staffing ( $\beta = 0.22$ , p = 0.07), supportive environment ( $\beta = 0.24$ , p = 0.06), and health ratings ( $\beta = 0.24$ , p = 0.05) explained 25.3% of the variance in F-PCH (F(4,55) = 4.66, p < 0.01).

#### 4.4.2. Factor-physical and social environment

There was a significant difference between tenure-track vs. non-tenure track F-PSE scores, (t(55.90) = 2.39, p < 0.05), with the non-tenure track participants reporting higher levels of F-PSE than tenure track participants ( $\Delta M = 0.38$ ). Participants who reported that their department was adequately staffed reported significantly higher levels of F-PSE than those who did not perceive their department as being adequately staffed (t(230) = -2.64,p < 0.01;  $\Delta M = 0.23$ ). Participants who reported that the environment supported a healthy lifestyle had significantly higher levels of F-PSE than those who did not perceive their environment to support a healthy lifestyle (t(231) = -7.34, p < 0.01;  $\Delta M = 0.67$ ). Faculty, staff, and administration F-PSE levels were also significantly different, (F(2,230) = 5.42, p < 0.01); administrators reported higher F-PSE levels than faculty ( $\Delta M = 0.56$ ). F-PSE levels significantly differed based on personal health rating (F(3,232) = 5.65,p < 0.01), with those who rated their health as "excellent" reporting significantly higher levels of F-PSE than those who rated their health as "fair/poor"  $(\Delta M = 0.95, p < 0.01)$ . F-PSE levels of those who identified having a disability were nearly significantly lower than participants without a disability  $(t(235) = 1.79, p = 0.074; \Delta M = 0.31).$ 

Together, tenure/non-tenure track ( $\beta = -0.23$ , p = 0.07), adequate staffing ( $\beta = 0.06$ , p = 0.62), supportive environment ( $\beta = 0.40$ , p < 0.01), and health ratings ( $\beta = 0.15$ , p = 0.22) explained 29% of the variance in F-PSE levels (F(4,53) = 5.27, p < 0.01).

#### 4.4.3. Factor-volition

There were no significant differences in F-V levels based on tenure/non-tenure status (t(59) = 0.82, ns) or based on perceptions of adequate vs. inadequate staffing of the department (t(232) = -0.51, ns). Participants who perceived their environment as supporting a healthy lifestyle reported significantly higher F-V levels, t(233) = -2.44, p < 0.05. Responses in F-V levels between faculty, staff, and administration were significantly different (F(2,232) = 7.13, p < 0.01), with both faculty ( $\Delta M = 0.31$ ) and administrators

 $(\Delta M = 0.52)$  reporting higher levels of F-V than staff. F-V levels significantly differed based on personal health rating  $(F(3,234)=6.96,\ p<0.01)$  with those who rated their health as "excellent" reporting significantly higher F-V levels than those who rated their health as "very good"  $(\Delta M = 0.43,\ p<0.01)$ , "good"  $(\Delta M = 0.43,\ p<0.01)$  and "fair/poor"  $(\Delta M = 0.98,\ p<0.01)$ . F-V levels also differed based on the number of direct supervisors  $(F(5,230)=3.79,\ p<0.01)$ , with participants who reported having no direct supervisors reporting higher levels of F-V than participants who reported having 3 direct supervisors  $(\Delta M = 1.26,\ p<0.05)$ .

Together, health ratings ( $\beta = 18, p = 0.01$ ), supportive environment ( $\beta = 0.12, p = 0.07$ ), faculty/staff/ administration ( $\beta = 0.07, p = 0.31$ ), and number of supervisors ( $\beta = 0.20, p < 0.01$ ) explained 11% of the variance in F-V, F(4,225) = 7.02, p < 0.01.

#### 5. Discussion

# 5.1. Tenure and non-tenure differences

Employees in non-tenure track positions had higher levels of F-PCH and F-PSE. Prior research has suggested that those in a non-tenure track position are more committed to their institutions, have less overall workload, report less role conflict and have greater work-life balance than those who are tenured or are in a tenure-track position [5]. F-PCH includes having enough energy and time for activities other than work. Those who were in a nontenure track positions have been shown to spend less time doing work outside of work hours giving them more time to spend with their families and pursuing leisure activities [5]. F-PCH also includes perceptions of being able to fulfil work expectations, and non-tenure track employees reported higher levels of F-PCH than tenure track faculty, which may be due to less conflict and ambiguity about their work expectations [5]. It is possible that there is more of an emphasis on teaching versus service and scholarship for non-tenure track employees which may have contributed to these differences. Additionally, non-tenure track employees may not have research related requirements, which may reduce the level of competition between colleagues. This decreased sense of competition between colleagues may promote a better sense of working together and belonging, concepts that are represented in F-PSE.

# 5.2. Perceptions of staffing

The results of this study indicate that those who perceived their department to be adequately staffed had higher levels of F-PCH and F-PSE. If employees stated that their departments were adequately staffed, there was an increased likelihood that they had enough time to meet their job demands, were able to maintain energy for other tasks, and fulfill expectations as represented by F-PCH. Additionally, those who viewed their department as adequately staffed tended to have better communication with supervisors or colleagues and a positive social and physical environmental experience as represented by F-PSE. Employees in departments that were not adequately staffed may experience higher work demands such as taking on additional responsibilities to cover vacancies or fulfilling responsibilities duties normally outside their job description or level of experience. The social atmosphere may be effected by this type of situation, with increased stress and lack of communication in departments with decreased resources. This is an important finding as many colleges and universities are under financial strain and need to make decisions about how to deliver services in a more cost effective manner. The implications of stressors such as inadequate staffing and role overload [10] may result decreased job satisfaction which can, in turn, lead to negative health outcomes [4]. This is highlighted in several participants' comments, including this quote "in the era of budget cuts, we're constantly being asked to do more with less resources."

# 5.3. Staff, administration and faculty differences

Staff reported the highest levels of F-PCH, possibly perceiving that they were still able to meet their original work demands and experiencing lower levels of competition than faculty may feel as related to tenure and promotion. On the contrary, faculty have jobs that often extend beyond the typical 9 to 5 hour workday and may have additional requirements related to tenure and promotion. This is reflected in one participant's response "all faculty appear overwhelmed with increasing roles, commitments and requests made of them from admin, peers, and students". Interestingly, staff reported lower levels of F-V overall than faculty and administration. Staff may have less control over their assigned work and this may lead to decreased investment in the progress of their

work. Prior studies have shown the importance of a sense of control over ones work and indicate that a lack of control can lead to poorer outcomes [20]. Administration reported higher levels of F-PSE than faculty. Administration may have more comfortable offices in comparison to faculty, who may be assigned to small offices or none at all. Ideally administrators work in highly effective teams which may contribute to a stronger social environment. It is possible that administrators feel a sense of responsibility to foster a positive social environment for the well-being and productivity within a unit or department. As results of previous research suggested, positive relationships and support from co-workers and management can help employees cope with stress and increase overall satisfaction, which is extremely important during times of organizational change [12, 14].

# 5.4. Health and healthy lifestyle

Employees who perceived that their work environment supported a healthy lifestyle and employees who perceived themselves as healthy reported more positive perceptions of the work environment across all three factors, F-PCH, F-PSE and F-V. Both one's health and the structure of the work environment to support one's health are related as they demonstrate a link between perceived health and workplace productivity, which is consistent with other studies [4, 20]. This suggests that people who perceive their health as excellent may be able to perform their job better, may feel they have more control over their work and may view their work as important. Some employers are beginning to see the link between these factors and are implementing wellness programs to improve the overall health and satisfaction of their employees. In turn, this can lead to increased employee productivity and cost savings for the organizations via lower healthcare costs [21] and decreased absenteeism and turnover rates [22]. Healthcare professionals can advocate for their role in wellness and prevention through implementing employee programs on topics such as ergonomics, healthy lifestyle design, and the importance of work/life balance.

#### 5.5. Number of supervisors

Employees who reported to three or more supervisors reported lower levels of F-V. These individuals

may feel that their work is less stimulating and important, with less control over content of work, as represented by F-V. Staff reported lower levels of F-V than faculty and administrators, and it is possible that in general, staff were more likely to have an increased number of supervisors. There are resulting implications for corresponding health concerns, which relate to prior studies concerning the importance of control in the work place [21].

#### 5.6. Predictive models

These models are important as they can inform employers of appropriate target groups when designing programming on college campuses. As suggested in the literature reviewed for this study, the changes being faced by colleges and universities can result in resource reduction, different expectations, and increased stress [6]. By identifying those groups of employees who are predicted to have lower levels of PCH, PSE and V, appropriate workplace initiatives can be developed such as wellness programming to support health, flexible work schedules, development of appropriate department staffing plans, and efforts to facilitate communication that may help employees to cope with the organizational changes.

### 6. Implications for future research

When testing the fit of the items under each of the three identified factors, there were 2 items that were removed due to poor fit (see Table 3). It would be valuable to investigate these items individually, especially item 11 since it relates to acknowledgement of work through such things as wages and promotion. Other studies have suggested that this can be an important factor in the work experience and is worthy of further exploration in the post-secondary education sector [12]. In the multiple regression analyses, staff/faculty/administration was not able to be analyzed for F-PCH or F-PSE and part- time/full- time was not able to be analyzed for F-PCH due to the small number of participants in administrative and part time positions. Therefore, these items could be explored in future studies.

Responses from participants who reported a disability approached significance when answering items within F-PSE. As suggested in the present study, the physical and social environment can have an impact on the work experience of people with disability.

Table 3
Factor Analysis and Internal Consistency Ratings

	Range	M	SD	α
Performance Capacity and Habituation (F-PCH)	1.00-4.67	2.27	0.91	0.703
1. I have enough time to do the work that I'm expected to do				
4. I have energy for other activities than work during the daytime				
8. I am able to fulfill the expectations that are placed on me at work				
2. The work I do is reasonably demanding				
Physical and Social Environment (F-PSE)	1.00-3.67	1.84	0.62	0.786
5. I work well together with my colleagues				
6. I feel that I belong to the group at work				
7. My communication with my superiors is good				
10. My contact with customers/ clients/ audiences/ students or others excluding superiors is good				
12. My physical work environment is good				
13. I have the necessary, well-functioning tools/ equipment I need for my work				
14. The atmosphere at my workplace is good				
Volition (F-V)	0.00 - 4.67	1.84	0.71	0.715
3. The work I do is stimulating				
9. I am able to influence the content of my work				
15. What I do at work is important				
11. What I do at work is acknowledged in terms of, for example, wages, further education, promotion				

*Note*. Italicized items were dropped.

abilities. However, due to the small sample size as well as the very small sub-group of people with disabilities, we were unable to draw any conclusions. Further studies could investigate the experiences of individuals with disabilities who work in the post-secondary education sector.

In the present study, administrators had higher levels of F-PSE than faculty, and it is important to note that this factor looked at both the physical and social environments together. It would be of interest to examine this further in an attempt to determine if there are differences between employee perceptions of the physical and social environments. When addressing the number of direct supervisors, employees who had 0 direct supervisors had higher levels of F-V compared with employees with 3 supervisors. However, there was a very small sample size for employees without any direct supervisors. Further research with a larger sample size can further investigate the relationship between volition and number of supervisors in the academic setting. Additionally, this study did not ask participants to report their job titles or provide any information on their duties. Other researchers have reported that recognition and achievement can lead to a better ability to cope with job stress [12]. Job rank/title may also have an impact on F-PCH and F-PSE and this would be an area of future research. Finally, it would be worthwhile to ask employees to rate their stress levels when investigating the relationship between stress and F-PSE, F-V and F-PCH in the post-secondary education sector.

#### 7. Limitations

A small US-based college cannot be considered to be representative of the post-secondary education sector. The response rate of 13.6% of the overall eligible participants at this particular institution is also low. However, there was a higher response rate from staff and administration than faculty. When the staff and administration group was broken down further, the sub-sample of administrators was also very small. Further comparison groups across multiple institutions would be useful for future studies; increasing the generalizability of the results. Additionally, the survey was distributed via email communication with no alternative options for completing the survey. As a result, employees without access to a computer may not have participated and this may have limited the response rate from certain job categories such as facilities and custodial staff. Such employees may have very different work experiences from faculty and administrators. It is important to note that the small college in which the present study was conducted was in the second year of offering a comprehensive wellness program that is provided at no cost to all employees. It is possible that this campus commitment to employee wellness contributed to the overall high ratings in the areas of personal health and perceptions of the campus supporting a healthy lifestyle. The researchers were employees of the same institution where the study took place, so there is a chance they could have knowledge of the composition of the response groups.

#### 8. Conclusion

To gain a better understanding of the current campus climate of a small US-based college, participants completed the Work Environment Impact Self Rating Scale (WEIS-SR) through an anonymous online survey. Work is meaningful and essential for the majority of adults in our society, and therefore the work environment deserves our attention. There are a number of components of the employee work experience on college campuses which can have both positive and negative effects on individual employees. Results suggest that special attention should be paid to the work environment of faculty, staff and administrators on college campuses. The WEIS-SR can be a valuable tool to look at the relationships amongst performance capacity and habituation, volition and the physical and social environment and various factors within the work environment. This important area should continue to be a focus in future research, to gain more insight into the experiences of workers in the post-secondary education sector during this time of rapid change.

#### **Conflict of interest**

None to declare.

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