Does Healthy Living Matter to Work Outcomes? Effects of Exercise and Health Conscious Identity on Employee Job Performance and Life Satisfaction

Satvir Singh Angelo State University

Christopher Loper Angelo State University

Yash Vidyarthi Franklin High School

Organizational behavior and human resource management scholarship and practice is interested in positive employee outcomes. Even though research has examined a host of work factors ranging from personality and emotions to leadership and culture, it is not clear how factors outside of work such as lifestyle influence employee performance and satisfaction. We develop theory on health conscious identity as it affect important work outcomes. We draw on emerging societal trends to outline how exercise affect employee job performance and life satisfaction. We also contend that health conscious identity has positive effect on employee job performance and life satisfaction. Our study integrates facets such as media influence, pandemic effect, and recommendations from health authorities with conventional issues of employee attitude, behavior, and well-being. Data from 280 employees and 58 supervisors supported the hypothesized relationships. We discuss implications on organizational practices in the emerging work order and suggest future research directions.

Keywords: lifestyle, health conscious identity, exercise, performance, satisfaction

INTRODUCTION

The saying goes that an apple a day keeps the doctor away, but does an apple a day keep employees productive at work and satisfied with life? There has been a recent trend in which people are becoming more aware of their health and eating habits. There is a plethora of information related to healthy eating and healthy living that is readily available. This can come from social media, TV, magazines, etc., and the focus on a healthy lifestyle is increasing in both quantity and quality of information available as more and more people care about these issues. Healthy eating and dietary trends have become prevalent due to widespread health concerns with issues related to obesity and diabetes. However, it is not clear how these healthy trends impact organizational outcomes.

As people 'consume' media and understand the consequences of their actions (or inactions), they generally become much more health conscious. This leads to people developing health-conscious identity (HCI).

A person who identifies as health conscious is someone who thinks about the long-term health effects of their food choices and other decisions that they make in relation to their health (Sparks & Guthrie, 1998). We note that even if a person is misinformed in relation to what is best for the long-term health of their body, if they are actively aware of their health and how they interact with it, they are considered to have a health-conscious identity.

Our paper makes three important contributions to the literature and practice. First, we integrate the emerging societal trends and conditions with organizational theory and practice. We argue that workplace is not isolated from the rest of the non-work changes, and therefore existing models may need a reexamination as societies evolve with time. Second, we develop theory on health conscious identity as a novel and potent identity that has implications to work. Research on identity is not new but its extension to healthy living is useful and timely for finer understanding of work outcomes. Third, our paper shows that practicing managers need to incorporate new ways to manage workplace to keep employees productive and satisfied. This is important as the traditional demarcation or separation of work and non-work worlds are blurring owing to changes in technology and globalization.

THEORY AND HYPOTHESES

Employees are people who have a life outside work with potential implication to work. In today's world a large section of society is becoming more conscious of health. A health-conscious individual thinks health effects of diet, lifestyle, and other decisions with respect to overall living (cf., Sparks & Guthrie, 1998). These people, who have a health-conscious identity, are more likely to spend money in areas to enhance their self-image as a person who is actively managing their health. For example, products like smart watches pander to this idea that having that specific product makes you "healthier", and so these products tend to sell well (Quaye et al., 2021).

Health identity has also emerged more important in the recent times because of certain developments in the world. One cannot ignore how COVID-19 pandemic has affected the world in the last three years. During the period starting in March of 2020 when most things that were in-person, including offices, were shut down, employees had a chance to establish a new routine at their houses as they worked from home. Many of these routines involved more physical activity, specifically leisurely physical activity, such as taking walks (Wilms et al., 2022). Even before the pandemic, the network of global health clubs (gyms with memberships) was up over 37% from ten years ago (IHRSCA). Also, during the lockdown period, it was almost impossible to purchase home gym equipment because it was always sold out due to so many people wanting to create their own personal mini-gym and get into fitness while stuck at home. During the pandemic, there were also many "fad" diet trends that went around, such as the keto diet. This trend of people becoming more physically active and actively managing their health contributes to the larger movement towards being more health conscious. These movements towards a healthier lifestyle and a more active lifestyle will likely continue to grow, and it is important to understand their effects in all areas, including in the workplace.

According to the American Centers for Disease Control, over 53% of Americans get the proper amount of aerobic physical activity, and 23% get the proper amount of aerobic and muscle-strengthening activity (Centers for Disease Control). Both numbers have been steadily increasing over the past ten years. It has been proven in previous research that an appropriate amount of leisure activities can lead to increased job performance (Wang et al., 2022). Leisure activities are defined as any activities outside of the workday that have nothing to do with work and are controlled by the individual. These activities can include non-physical activities, such as reading or playing video games. This leisure time can also include what would be considered exercise. This could include basic aerobic exercises such as taking a walk or a light jog, or it could be a very intensive time of lifting weights at the gym or playing a sport. Whatever the activity is, having the proper amount of leisure time outside of work is very important to having high job performance

and to the employee's overall well-being. Many people make a daily habit of doing whatever leisure activity they choose, and that has proven benefits. It has been shown that a daily exercise routine can lead to higher satisfaction with one's quality of work, especially for white collar jobs where most of the day is spent being physically inactive (Coulson et al., 2008). Even if the element of physical activity is in the middle of the workday, it can still lead to better results from the employees (Brummelhuis et al., 2021). For an employee who exercises regularly, they will have a higher job performance when compared to employees who do not exercise.

Hypothesis 1: Exercise is positively correlated with employee job performance.

As stated above, having an aspect of exercise is very important for employees on a daily basis. It has been extensively studied that exercise leads to more motivated individuals in the workplace. A daily routine that includes physical activity will lead to a higher happiness and well-being for people of all ages (An et al., 2020; see also Alsubaie, 2021). This holds true for people who enjoy exercising, and for people who don't. The effects that the physical activity has on perceptions and outlooks on life have very little relation to the individual's attitude towards the physical activity. Even if a person dislikes doing the exercise, it will still have the positive effects on them (Guérin et al., 2019). Additionally, there are long term effects of repeated exercise. Repeated daily exercise leads to being generally healthier, which leads to higher levels of happiness in life. In a study of college students, it was found that the more intense and repeated the exercise, the more positive the effect on the overall well-being of the students (Zhang et al., 2022). This could be used to promote a more intensive physical activity regiment than previously mentioned. Nonetheless, any amount of physical activity is beneficial. Across all stages of life, increased physical activity leads to increased life satisfaction (Maher er al., 2015). For an employee who exercises regularly, they will have higher life satisfaction compared to employees who do not exercise.

Hypothesis 2: Exercise is positively correlated with employee life satisfaction.

The most obvious benefit of being health conscious is that a person is more aware of what they are putting into and doing to their body. Furthermore, the benefits of being health-conscious stretch way beyond just that. By putting high quality food into the body in the right quantity, it is setting the employee up to success. A person with a health-conscious identity will feel better that they are eating better, and because of that, they will have a higher well-being. There is also the aspect to being health-conscious that is unrelated to diet. This aspect follows a similar idea; it is thinking about the effects of other areas (non-dietary) and how that affects overall health (Sparks & Guthrie, 1998). This would include things like not smoking tobacco, not drinking alcohol, wearing sunscreen, making sure that all injuries are given time to fully heal, etc. These are not related to diet, but they affect the long-term health of the employee, and they are a part of what makes someone a health-conscious individual. All of these things would lead to being healthier, which leads to a higher well-being. To add on to that, It has been shown that an employee who has a higher well-being will have higher job performance (Salgado & Moscoso, 2022). For an employee who has a health-conscious identity, they will have higher job performance compared to employees who do not.

Hypothesis 3: Health-conscious identity is positively correlated with employee job performance.

To people who have a health-conscious identity, they will generally make choices that will be for the betterment of themselves and their health. This could be as simple as choosing to drink water throughout the day or choosing to reapply sunscreen on a day at the beach. This could also be as involved as structuring a diet that is very specific to them and works for their body. Either way, an employee who is highly health-conscious will frequently make decisions that benefits their health. Because these decisions benefit the person and they are made in the best interest of that person's health, it would make sense that a person who identifies as health-conscious would have a high level of self-rated health (SRH). SRH is normally a very

good indicator of actual health, as people tend to accurately reflect their own health. This is especially true for people who are actively thinking and making decisions in the interest of their health, which is the case with people who are health conscious. It has been shown in previous research that higher levels of SRH lead to increased levels of life satisfaction (Alsubaie, 2021). For an employee who has a health-conscious identity, they will have higher life satisfaction compared to employees who do not.

Hypothesis 4: Health-conscious identity is positively correlated with employee life satisfaction.

METHODS

Data were collected from employees of small to medium sized companies in Southwest U.S. Workgroup supervisors and employees were contacted and asked for voluntary participation in this study. First, employees filled the surveys. After that, their supervisor answered questions related to employee performance. We gathered data from 58 supervisors and 280 employees. Half of the supervisors and 54% of the employees were females. Average organizational tenure was 3.64 years.

We collected data from employees about their health-conscious identity, exercise routine, and life satisfaction. Supervisors answered questions related to employee performance. We used the following measures of the study variables.

Health conscious identity. We used three item scale developed by Sparks and Guthrie (1998). An example item is "I think of myself as someone who generally thinks carefully about the health consequences of my food choices".

Exercise. We used a three-item scale to measure exercise as behavior and attitude. An example item is "I do exercise/yoga every day".

Life satisfaction: We used four item scale developed by Diener, Emmons, Larsen, and Griffin (1985). An example item is "In most ways my life is close to my ideal".

Job performance: We used four item scale developed by Tsui (1984) and Wayne, Shore, and Liden (1997). An example item is "This employee has been performing his/her job the way I would like it to be performed".

Controls: We controlled for participants age, marital status, and organizational tenure.

Results

Before testing the hypothesized relationships, we ran bivariate correlation among study variables. The results of correlation value along with mean and standard variance is shown in Table 1. We used regression technique in SPSS to test for the relationships. Our regression model accounted for potential effects of the control variables before testing the main relationships.

To test Hypothesis 1, we regressed employee job performance on exercise in the presence of control variables as shown in Table 2. The regression coefficient was 0.09 and significant, showing support for Hypothesis 1.

To test Hypothesis 2, we regressed employee life satisfaction on exercise in the presence of control variables as shown in Table 2. The regression coefficient was 0.11 and significant, showing support for Hypothesis 2.

To test Hypothesis 3, we regressed employee job performance on health conscious identity in the presence of control variables as shown in Table 3. The regression coefficient was 0.08 and significant, showing support for Hypothesis 3.

To test Hypothesis 4, we regressed employee life satisfaction on health conscious identity in the presence of control variables as shown in Table 3. The regression coefficient was 0.12 and significant, showing support for Hypothesis 4.

TABLE 1
CORRELATION AMONG STUDY VARIABLES, MEAN AND STANDARD
DEVIANCE VALUES

		Std.		Marital				Job	Life
	Mean	Dev.	Age	Status	Tenure	Exercise	HCI	Performance	Satisfaction
Age	30.360	13.065							
Marital Status	1.740	0.439	-0.492**						
Tenure	3.640	4.992	0.503**	-0.302**					
Exercise	2.515	1.180	-0.126*	0.037	-0.141*	:			
HCI	2.984	1.087	0.099	-0.078	0.059	0.436**			
Job									
Performance	4.036	0.777	0.048	-0.018	0.08	0.127*	0.129*		
Life									
Satisfaction	3.388	0.951	0.141*	-0.241**	0.133*	0.128*	0.160**	0.05	

N = 280, HCI = Health conscious identity

TABLE 2
REGRESSION RESULTS OF EMPLOYEE JOB PERFORMANCE AND LIFE SATISFACTION
ON EXERCISE IN THE PRESENCE OF CONTROL VARIABLES

	Job Performance	Life Satisfaction	
Intercept	3.67**	3.80**	
Age	.00	.00	
Marital Status	.03	46	
Tenure	.01	.01	
Exercise	.09*	.11**	

Note: n = 280 employees, * p < .05, ** p < .01.

TABLE 3
REGRESSION RESULTS OF EMPLOYEE JOB PERFORMANCE AND LIFE SATISFACTION ON HEALTH CONSCIOUS IDENTITY IN THE PRESENCE OF CONTROL VARIABLES

	Job Performance	Life Satisfaction
Intercept	3.69**	3.80**
Age	.00	.00
Marital Status	.02	46**
Tenure	.01	.01
Health Conscious Identity	.08*	.12**

Note: n = 280 employees, * p < .05, ** p < .01.

DISCUSSION

Overall, the results of the study suggest that individuals who identify as being health conscious and who exercise tend to have higher levels of job performance and life satisfaction compared to those who do not. This finding is consistent with previous research on the relationship between physical activity and well-being. These findings are also congruent with the concept of self-determination theory, which suggests that

^{**} Correlation is significant at the 0.01 level (2-tailed).

^{*} Correlation is significant at the 0.05 level (2-tailed).

engaging in activities that are meaningful and personally important (such as exercise and the health-conscious identity) can lead to increased well-being and life satisfaction.

A possible explanation for the observed relationship is that individuals who exercise and are health conscious may be more motivated and self-disciplined, which can translate into better job performance. Additionally, engaging in regular physical activity has been linked to improved mental health and cognitive function (Teferi, 2020), which could also contribute to better job performance and life satisfaction.

It is also possible that individuals who prioritize exercise and health may have more effective time management and self-regulation skills, which could lead to better performance at work and overall life satisfaction. These skills may be developed through the discipline and motivation required to consistently engage in healthy behaviors or follow a set routine of physical activity.

Our study has many strengths and limitations. One strength of our study was that we used multi-source data from employees and supervisors – thus reducing the same-source bias in the results. Our sample is also a strength because we used a moderately large size sample where employees were nested in several workgroups – making the findings our study robust and universalistic. Yet another strength of our study is that we used a time-sensitive data as the data were collected about 2 years after the start of COVID-19 pandemic. There are a few limitations to this study that should be considered when interpreting the results. First, the sample size was geographically centered in one region of Texas, which may limit the generalizability of the findings. Second, the study relied largely on self-reported measures, which can be subject to bias. Future research using larger samples and other objective measures of well-being would be valuable in replicating and expanding upon these findings.

Our study suggested many avenues for future research. More studies in different cultures/countries may be needed to generalize the findings. It is possible that cultural variables such as collectivism/individualism and power distance can exacerbate or mitigate the relationships examined in this study. We conjecture that societies that value individual empowerment may show a greater impact of health conscious identity. Future research should account for individual personality to examine how individual differences impact the strength of main relationships. Follow up studies should account for workgroup effect on employee outcomes. Likewise, the effect of supervisor's identity is also likely to affect employees – and this need examination in future studies.

Our findings have practical implications for both individuals and organizations seeking to improve well-being and productivity. Employer programs that encourage exercise, such as an on-site gym or reimbursement for gym membership fees, could prove beneficial to employee performance, which would be an important investment for a company to make in order to increase job performance. There could also be benefit in encouraging a health-conscious identity in the workplace. Measures such as standing desks and health food options might encourage workers to have a more health conscious identity, which would make them more productive workers, as well as more satisfied individuals.

CONCLUSION

Overall, the findings of this study suggest that exercise and health-conscious identity are important factors in job performance and life satisfaction. The present study adds to the growing body of evidence supporting the relationship between exercise and health behaviors, and positive outcomes in both work and overall well-being. Future research should continue to explore this relationship, as well as the mechanisms through which exercise and health-conscious identity impact well-being and job performance.

REFERENCES

- Alsubaie, A.S. (2021). Associations between self-rated health, Life Satisfaction and physical activity among adolescents in Saudi Arabia. *Journal of Medicine and Life*, 14(5), 651–657.
- An, H.-Y., Chen, W., Wang, C.-W., Yang, H.-F., Huang, W.-T., & Fan, S.-Y. (2020). The relationships between physical activity and life satisfaction and happiness among young, middle-aged, and older adults. *International Journal of Environmental Research and Public Health*, 17(13), 4817.
- Brummelhuis, L., Calderwood, C., Rosen, C., & Gabriel, A. (2021). Is physical activity before the end of the workday a drain or a gain? Daily implications on work focus in regular exercisers. *Journal of Applied Psychology*.
- Centers for Disease Control and Prevention. (2019, May 30). 2018 National Health Interview Survey. Retrieved October 27, 2022, from https://www.cdc.gov/nchs/nhis/releases/released201905.htm#7a
- Coulson, J.C., McKenna, J., & Field, M. (2008). Exercising at work and self-reported work performance. *International Journal of Workplace Health Management*, *1*(3), 176–197.
- Diener, E.D., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75.
- Guérin, E., Strachan, S., & Fortier, M. (2018). Exercise and well-being: Relationships with perceptions of exercise identity-behaviour consistency, affective reactions to exercise and passion. *International Journal of Sport and Exercise Psychology*, 17(5), 445–458.
- Maher, J.P., Pincus, A.L., Ram, N., & Conroy, D.E. (2015). Daily physical activity and life satisfaction across adulthood. *Developmental Psychology*, *51*(10), 1407–1419.
- Quaye, E.S., Mokgethi, K., & Ameyibor, L.E. (2021). Health self-identity-based motivations and behavioral intentions: A Predictive model and segmentation analysis. *Social Marketing Quarterly*, 27(4), 347–369.
- Salgado, J.F., & Moscoso, S. (2022). Cross-cultural evidence of the relationship between subjective well-being and job performance: A meta-analysis. *Revista de Psicología del Trabajo y De Las Organizaciones*, 38(1), 27–42.
- Sparks, P., & Guthrie, C.A. (1998). Self-identity and the theory of planned behavior: A useful addition or an unhelpful artifice? *Journal of Applied Social Psychology*, 28(15), 1393–1410.
- Teferi, G. (2020). The effect of physical activity on academic performance and Mental Health: Systematic Review. *American Journal of Science, Engineering and Technology*, 5(3), 131.
- The Global Health and Fitness Association. (n.d.). *IHRSA: International Health, Racquet; Sports Club Association Health Club Membership Now 183M Strong*. IHRSA Report: Worldwide
- Tsui, A.S. (1984). A role set analysis of managerial reputation. *Organizational Behavior & Human Performance*, *34*(1), 64–96.
- Wang, P., Wei, X., Hu, D., & Meng, F. (2022). Does leisure contribute to the improvement of individual job performance? A field tracking study based on the Chinese Manufacturing Industry. *Sustainability*, *14*(11), 6594.
- Wayne, S.J., Shore, L.M., & Liden, R.C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82–111.
- Wilms, P., Schröder, J., Reer, R., & Scheit, L. (2022). The impact of "Home office" work on physical activity and sedentary behavior during the COVID-19 pandemic: A systematic review. *International Journal of Environmental Research and Public Health*, 19(19), 12344.
- Zhang, Z., He, Z., & Chen, W. (2020). The relationship between physical activity intensity and subjective well-being in college students. *Journal of American College Health*, 70(4), 1241–1246.