

ASSOCIATION OF SEDENTARY BEHAVIOR AND
SOMATIC SYMPTOMS ON JOB PERFORMANCE
AMONG CALL CENTER EMPLOYEES



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CERTIFICATE OF APPROVAL

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Association of sedentary behavior and somatic symptom on job performance
among call center employees

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DECLARATION

It is declared that this is an original piece of my own work, except where otherwise acknowledged in text and references. This work has not been submitted in any form for another degree or diploma at any university or other institution for tertiary education and shall not be submitted by me in future for obtaining any degree from this or any other University or Institution.

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Arooba Sajid

ABSTRACT

The aim of this research study is to determine the relationship between sedentary behavior, somatic symptoms and job performance of call center employees. Sedentary work involves sitting most of the time, but may involve walking or standing for brief periods of time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met. Office workers are highly sedentary, increasing their risk of health problems. In this research study a sample of call center employees has been taken. It was found that sedentary behaviour has a significant impact on job performance of call center employees. However, no relationship has been found between somatic symptoms and job performance.

Keywords: Sedentary, Job Performance, Health, Somatic Behavior, Prolonged Sitting, Minimal Movement

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Chapter 1

INTRODUCTION

Sedentary behavior is defined as any awake behavior with an energy expenditure of ≤ 1.5 metabolic equivalents (METs) while sitting, reclining, or lying down. This often indicates that a person is acting sedentary whenever they are sitting or lying down. Common sedentary behaviors include reading, driving, playing video games, watching TV, and using computers. Numerous harmful health impacts include increased risk of cancer, cardiovascular disease, diabetes, hypertension, dyslipidemia, musculoskeletal illnesses (such as osteoporosis and knee pain), mental health issues, and enhanced mortality from all causes. The detrimental effects on one's health worsen as one's daily inactive time grows. It is crucial to lower the SB because of this.

A psychological disorder known as somatic symptom disorder makes the patient feel very upset about their physical symptoms and health issues. Extreme anxiety is experienced by people with somatic symptom disorder in relation to one or more of their symptoms. The illness frequently impairs the patient's capacity to function and daily activities, which has a negative effect on their quality of life. An excessive amount of sitting or sedentary behavior is becoming the norm in today's world. While you're reading this, you're most likely sitting down or perhaps lying down. The majority of our activities now require us to remain seated. When working at your desk, for example, you take a seat. When you arrive at a meeting, you take a chair. And at the end of the day, settle down to watch TV on the couch to unwind.

The human body is meant to be in motion. For a considerable amount of time, the majority of workers performed manual labor of some kind, and their jobs necessitated constant physical activity. But work nowadays is significantly less physically taxing because of the transition towards more technical and office-based occupations. People now spend more time

sitting than they did in the past. With fewer physical obstacles, it should come as no surprise that a significant section of the workforce is suffering from the negative physical effects of inactivity and immobility, which include an increased risk of obesity, type 2 diabetes, cardiovascular disease, and premature death.

Over the past ten years, there has been a sharp rise in the amount of study on sedentary working practices. I'll cover some of the most recent research on this topic in this post, which will include an overview of sedentary behaviors in the workplace, the benefits of taking breaks for cognitive health, the psychosocial effects of taking breaks, and various interventions to lessen sedentary behavior at work.

Call center employees usually perform their job while sitting for extended periods of time. These individuals usually have to maintain their communication skills, handle customer interactions well, and manage large workloads. Concern over the potential impacts of physical complaints and sedentary behavior on their capacity to do their professions is growing. (Jan's et al., 2007).

Sedentary behavior refers to low-energy expenditure (1.0-1.5 METS) behaviors involving sitting, reclining, or lying down for long periods of time while awake (Stone et al., 2019). In addition to some sedentary behaviors at work, common sedentary behaviors in life include static activities such as sitting, reclining or lying down, watching TV, driving, using electronic products (video games, computers), riding in transportation, etc. (Li et al., 2021). In the sitting position, the abdominal muscles relax, and the lower part of the S-shaped physiological curvature of the spine changes from lordosis to kyphosis, causing the force on the corresponding parts of the body to change. The lower limbs bear a heavy load in the standing position and the blood return is poor. Sitting and standing for long periods of time can cause health damage (Triana et al., 2017).

Somatic disorders are mental disorders that provoke the occurrence of pathological sensations at the physical level. In this case, any evidence of the disease is either absent or present to an insignificant extent, insufficient for such obvious expression of clinical signs. That is, no diagnostic methods indicate the presence of a serious pathology in the affected organ, and the patient experiences very real physical manifestations of the disease (Witthöft et al., 2023).

According to a study by the American Psychiatric Association in 2004, the number of people worldwide suffering from somatoform disorders was about 1% and continues to grow every year. At the same time, WHO notes that about a quarter of patients complaining of somatic pathology are based on psychosomatic disorders. Women are most susceptible to this pathology, and its onset occurs at the age of 15-25 years, but the disease can also occur in men, people of any age, including the elderly and children (Lavie et al., 2019).

In today's world of work, office workers face a variety of challenges (Tremblay et al., 2017). From the expectation of being constantly online and available to the endless hours spent in front of their screens, the hurdles are both physical and mental. These circumstances not only impact efficiency and productivity, but also take their toll on the health of all employees (Friedenreich et al., 2021).

The number of people who spend their working hours behind a desk is constantly increasing worldwide (Teychenne et al., 2019). The human body is designed for movement, and constant "sitting work" damages it in the long term. Spinal diseases are well on their way to becoming the number one widespread disease: one in five days lost due to illness among office workers is primarily due to back problems (Landais et al., 2022). The so-called mouse arm or RSI syndrome are also common reasons for sick leave. Back, arm and shoulder problems usually occur in people who work a lot with the PC mouse every day and strain their

fingers, hands and arms with micro-movements repeated thousands of times (Rawlings et al., 2019).

The health-preserving, health-promoting and restorative effects of Regular exercise has an impact on the cardiovascular and musculoskeletal systems undisputedly proven (de Marées, 2003; Halle et al., 2008; Hollmann & Strüder, 2009). Also regarding the preventive and rehabilitative effects of physical activity on the mental health, scientific evidence is constantly increasing (Hölter, 2011). In addition Regular exercise shows positive effects on the development and function of the human brain and thus cognitive abilities (Hötting & Röder, 2010). These positive effects of exercise can be seen across the entire spectrum Prove lifespan (Rosenhagen et al., 2017).

In contrast to the constant promotion of exercise, through change of life from child to adult, the natural urge to move always remains more restricted. The older people get, the more common they are Situations that are characterized by a lack of movement. During school, theoretical learning requires increasingly longer periods of sitting be spent (Mayne et al., 2021). Particularly in subsequent training for professions that... Office and computer workstations are low-movement phases present. In addition, the type of travel using public transport is different and cars become increasingly physically inactive. This is what physical inactivity has been like in recent years an increasingly important health problem for the European population and is now considered an independent risk factor Development of chronic diseases (depression, obesity, type 2 diabetes, cardiovascular diseases and all-cause mortality) (Rawlings et al., 2019).

According to the World Health Organization (WHO) (2006), the consequences were Physical inactivity is the cause of approximately 600,000 deaths per year in Europe Region in 2006, which is already one million in 2020 (World Health Organization, 2020). Current information about the member states of the EU show that 6 out of 10 people over the age of 15

never or rarely do sports and more than over half never or rarely engage in other types of physical activity such as cycling, dancing or gardening (Directorate-General for Education and Culture, 2014).

In particular, sedentary behavior contributes to the extent of this individual physical inactivity. Sedentary behavior describes any Behaviors while awake that involve sitting or lying down without active movement of the lower or upper body and/or through an energy consumption of less than 1.5 MET are marked (Rosenkranz et al., 2020).

The term "job performance" describes how well workers complete duties and responsibilities connected to their jobs. There are various metrics that are used to measure the performance level of employees these includes; service quality level, supervisor rating and job satisfaction.

The main aim of this study is to determine the impact of sedentary behavior and somatic symptoms on job performance of call center employees (Taylor et al., 2017). The results of this study may add to the body of knowledge already available on sedentary behavior and its effects on worker performance and health, especially in contact centers. The results could also be applied to the development of tailored therapies and workplace regulations to alleviate somatic complaints, lessen sedentary behavior, and enhance contact center employees' job performance. The ultimate objective is to raise call center operations' overall effectiveness as well as the well-being of its workforce.

Furthermore, in this study physical ergonomics has made great contributions to addressing the challenges that are due to sedentary behavior in the workplace and the workstation designing ergonomic will help to alleviate musculoskeletal problems, and as a result the risk of developing somatic symptoms among call center employees will be reduced. The study also includes the ergonomic principles that play a significant role in optimizing the design of workspaces, furniture, and equipment that are essential to promote comfort, safety,

and efficiency. Moreover, for instance, the adjustable chairs with lumbar support will play a significant role in maintaining proper posture and it will also help to reduce the strain on the spine during prolonged sitting. In that case, the ergonomic keyboards and mice are significant in minimizing the wrist strain and it is also helpful in preventing repetitive motion injuries. The availability of computer monitors are positioned at the correct height and it will be beneficial to reduce discomfort and eye strain. Organizations can create a more comfortable and supportive environment by incorporating ergonomic principles and as a result, it will enhance the employee well-being and job performance. Sedentary behavior and somatic symptoms have a great impact on mental health and well-being and in addition to this; the demands of their job roles and the prolonged periods of sitting will help the employees to experience heightened levels of stress and anxiety.

Moreover, employees must provide access to mental health resources and support services because it will help the employees to cope with the psychological effects of sedentary behavior and somatic symptoms. It may include the offering of counseling services and the management of the stress in the workshop, and alongside, the creation of a culture has a great role because it will encourage employees to seek help when needed and as a result, it will promote open communication and DE stigmatize mental health issues. It is necessary to address both the physical and mental aspects of employee health because it will make it easier for organizations to create a more holistic approach to well-being that supports overall job performance and satisfaction.

Alongside, it also has a great impact on the flexibility of the work schedule and it is significant to mitigate the negative effects of sedentary behavior and somatic symptoms among call center employees it will allow the employees to have greater control over their work hours and environment through flexible arrangements of work. For example, in that case, allowing employees to take short breaks throughout the day to stretch or engage in physical activity will

help the organizations to break up prolonged periods of sitting, and alongside, it will also play a great role in reducing the risk of developing somatic symptoms. Similarly, it can also be beneficial for employees to offer options for remote work or compressed workweeks because it will help the employees to manage their workload while balancing other commitments. Organizations can foster a healthier and more productive workforce by empowering employees to customize their work schedules and this customization will help the organizations to better accommodate their individual needs and preferences.

In the association of Sedentary Behavior and Somatic Symptoms on Job Performance among Call Center Employees health promotion programs have great importance and alongside, it is an effective strategy to address the sedentary behavior and as a result, the overall performance of the well-being will be increased. For example, organizing meetings and incorporating physical activity breaks into the workday will help the organizations to encourage the employees and as a result, it will make the organizations more active and reduce the amount of time spent sitting. On the other hand, providing access to healthy snacks and meals will help the organizations to support employees to make choices of healthier lifestyles. Moreover, incentivizing participation in health promotion programs through rewards or recognition will help the organizations to motivate the employees to prioritize their health and well-being; on the other hand, now it becomes easiest for organizations to create a supportive environment by fostering a culture of health and wellness therefore, as a result, it will facilitate positive behavior change and improves job performance outcomes.

In this study, data analytics has great importance because it will help the organizations to utilize the provide valuable insights into the relationship between sedentary behavior, somatic symptoms, and job performance among call center employees moreover, it will also play a significant role in identifying trends, patterns, and areas for improvement. For example, using wearable devices or activity monitors will help the organization to track the real-time

data of the employees on the pattern of sedentary behavior; on the other hand, it will help the organizations identify opportunities for intervention. Similarly, analyzing employee health data is significant because it will help organizations identify the risk of developing health problems related to sedentary behavior.

On the other hand, organizations can make informed decisions and develop targeted interventions by leveraging data analytics, and alongside, it is also significant to address the challenges of call center employees. This data drive is significant because it will help the organizations to lead to more effective strategies and as a result, this thing will improve the job performance of the employees within the organizations.

Call centers are locations that individuals can contact to get help or information on a range of subjects. They can be applied to emergency services, technical support, and customer service. Because of their desk-intensive and computer-dependent jobs, workers in contact centers are thought to be particularly susceptible to long-term health problems. This risk is increased by their prolonged workdays spent seated and by the little opportunity they have to get up from their desks.

Literature Review

According to Lavie et al., (2019) sedentary behavior, somatic symptoms, and job performance are complex issues with various aspects of the workplace environment and employee health and it is necessary to address these issues because the addressing of these issues will help the organizations to create a healthier and more productive workforce. On the other hand, organizations can empower call center employees to lead healthier lifestyles and perform their job roles more effectively with the help of initiatives such as physical ergonomics, work schedule flexibility, health promotion programs, mental health support, and data analysis. Organizations can ultimately enhance job satisfaction by prioritizing employee

well-being and it will also help the organizations to reduce absenteeism and as a result, the overall outcome of the organizations will be improved. Therefore, organizations can foster a culture of health and productivity by taking a proactive approach to addressing sedentary behavior and somatic symptoms in the workplace, and as a result, it will be beneficial for both the employees and the organization as a whole (Lavie et al., 2019).

According to Lack of exercise is a constant risk, especially for workers who spend most of their time in the office. For many office workers, the deficiency is so severe that they cannot fully compensate for it even through recreational sports. Many people are still unaware of the long-term consequences. In addition, a lack of exercise not only harms the body, the lack of exercise can also promote psychological problems such as depression and listlessness. Reference try to determine impacts of inactivity on human bodies and health. Reference found that low physical activity has an impact on the entire body. There may be severe repercussions. According to reference, work and income are the primary factors of insufficient exercise. Millions of people now spend their whole daily lives sitting down. Thus, a lack of mobility at work is just one aspect of it.

According to reference, due to sedentary behavior minimal oxygen is supplied to the brain. It is also difficult to breathe deeply when seated with a slouched posture. The brain receives less oxygen as a consequence. Fatigue and exhaustion are the outcome. Lack of exercise also leads to a decreased capacity for concentration at work that effects the job performance of employees. According to reference, brain can only function at its peak when it is properly supplied with oxygen and nourishment. Exercise is crucial to maintaining mental fitness throughout the day and enhancing concentration at work.

According to reference, underactivity causes major psychological effects like depression or burnout in addition to stress. People who lead sedentary lifestyles are more likely to experience depression, according to studies. The risk of depression is further increased by minimal exercise, more job done from home, and the consequent lack of social interaction. The rationale is that the mind is not intended to be permanently dormant, much like the body. This

implies that in order to remain active and healthy, your brain requires stimulation on a regular basis.

According to (Ayanniyi et al., 2010) low back pain (LBP) is becoming more common among office employees. Call centre employees have recently come under increased scrutiny in this area as their jobs have expanded. Their work is a major source of worry for them since it might lead to stress (Johnson et al., 2005; Oh et al., 2017); they also worry about sitting still (Toomingas et al., 2012). Call center staff are among those who rely on their voices to do their jobs, which raises the risk of voice problems caused by occupational oral communication disorders. 2014 (Vilkman). Other displays that are associated with symptoms are in neck /shoulder. Other symptoms are complexity of work, long time of customer's calls per day, when you're continuously working, lack of social support at work. The study also suggests an association between unfavorable work and management, poor physical and psychological environment, and other symptoms in computer-interactive tasks (Norman et al., 2005).

Indeed, a noteworthy study published in the BMC Musculoskeletal Disorders examines the possible advantages of reducing extended periods of sitting on the cognitive performance of sedentary office workers. The results of this comprehensive review showed that standing or low-intensity exercise can counteract the negative consequences of prolonged sitting, such as abnormal vascular and hormonal alterations, which may be linked to cognitive decline. However, it could take some time for certain employees to overcome their sedentary habits. Despite the fact that taking breaks at work might enhance cognitive function and lower health risks, research has shown that office workers are becoming less likely to take breaks. Researchers studying health psychology at Staffordshire University have conducted a study that looks at the social and psychological factors that affect workers' decision to take breaks. In order to do this, groups of office workers with varying levels of seniority were questioned about their lunch break practices.

Many SSD sufferers are unaware of their underlying mental health issue. They experience severe anxiety because they think they have physical illnesses. Due to the psychological symptoms of somatic symptom disorder, patients may see several different healthcare professionals, have numerous tests performed, and go through various procedures in an attempt to identify the serious illness or medical condition causing their symptoms—the majority of which will not have a physical cause. Even though they are not ill, patients with SSD may describe a wide range of medically inexplicable symptoms. Occasionally, these symptoms include discomfort and typical bodily feelings. The patient experiences health worry and psychological discomfort that is out of proportion to the severity of the underlying medical disease, even if one or more symptoms are being caused by it.

According to a study by Thorp et al. (2012), office workers engage in sedentary activities for up to 75% of their working hours. As a result, numerous businesses have put in place treatments aimed at lowering SB and encouraging non-SB activities. These interventions are different from those pertaining to physical activity in that they aim to break up extended periods of sitting in multiple, regular bouts as opposed to a single bout. Historically, in order to improve SB results, these interventions have changed the physical layout of the office (e.g., activity-permissive workstations: standing desks, cycle desks, etc.) by providing other work postures and/or being activity permissive.

Many possible differences in sedentary behavior of both male and female are more prevalent, female professional computer users are more prone to health-related symptoms than male professionals (Wigaeus et al., 2009). Occupations characterized by long periods of sitting have been linked to weight gain and obesity in men (Mummery et al., 2015).

Working at office and computer workstations in particular promotes this sedentary behavior such as sitting for long periods of time. A VDU workstation is defined as a “spatial area in the work system” that “contains Screen device(s) and, if necessary, additional devices

and other work equipment is equipped” (German Statutory Accident Insurance, 2015). At one Office workplaces include “planning, development, consulting, management, administrative or communication activities as well as functions supporting these activities carried out” (German Statutory Accident Insurance, 2015). There are currently 18 million office and computer workstations and this number is increasing continuously (Mullane et al., 2017).

According to Forberger et al., (2022) possible consequences of sedentary behavior are presenteeism (appearing at work despite symptoms of illness) and absenteeism (absence due to illness) promote, which in turn leads to lost productivity in the workplace and increased costs for companies (Forberger et al., 2022). Dynamic office workstations are has received more attention, particularly in recent years. They were developed to keep employees active (Buckingham et al., 2019).

Anxiety and depressive symptoms are also possible in a person with somatic symptom disorder. He or she might start to lose hope. Worldwide, the prevalence of somatic symptom disorder (SSD) is increasing as a result of an increase in risk factors such alcoholism, depression, physical or sexual abuse, mental stress, and poor lifestyles.

As technology advances, more and more people are shifting to sedentary office jobs. While these jobs offer many benefits such as job security and a consistent income, they can take a toll on employees' physical and mental health. The prolonged hours of sitting at a desk can cause a wide range of health issues such as weight gain, poor posture, back pain, and even increased risk of chronic diseases. Moreover, sitting for long periods can negatively impact mental health, leading to increased levels of stress, anxiety, and depression (Jones et al. 2020).

Employees who work in sedentary jobs often have less time to exercise, which leads to an increased risk of obesity, cardiovascular disease, and other health issues. The lack of physical activity can also lead to a decline in cognitive function, which can negatively impact an employee's performance and productivity (Hutchinson et al., 2001). Employers have a

responsibility to promote healthy lifestyle choices and ensure their employees are not at risk of developing health issues due to their sedentary jobs. Simple measures such as providing ergonomic furniture, encouraging regular breaks, and promoting physical activity can help improve employee health and well-being (Witt et al., 2004).

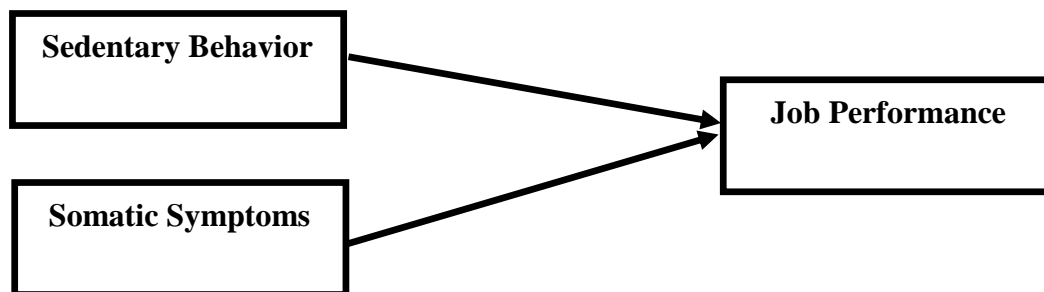
Employers can also encourage their staff to use their breaks to engage in physical activities like walking or stretching, and even offer incentives for employees to take up regular exercise. Additionally, providing healthy snacks and promoting a balanced diet can help employees maintain a healthy weight and reduce the risk of chronic diseases (Guitar et al., 2018). Sedentary office jobs can have a significant impact on employees' health and well-being. Employers must take proactive steps to ensure their employees are not at risk of developing health issues due to their jobs. By promoting physical activity and a healthy lifestyle, employers can help create a positive work environment that supports employee health and productivity (Macdonald et al., 2020).

Theoretical Framework

Primarily, there are three main variable in the research study. The independent variables are sedentary behavior and somatic symptoms. The dependent variable is job performance. In this research study the health performance model of Dr. Leonard Berry was used that was developed in 1994. This model plays a vital role in understanding the relationship between health issues and job performance. The framework help in determining the extent to which sedentary behavior effects health and performance level of employees (Smith et al., 2018).

In this model, stress, anxiety and job satisfaction level of employees are taken into account. This model is helpful in determining the impact of different health related issues caused due to sedentary behavior and its impact on the job performance of contact center employees. By examining the relationship between health and job performance, this model may be used to determine the reciprocal relationship. This framework also highlight the

importance of employee well-being and its overall impact on their job performance level (Chen et al., 2020). This theoretical framework offer a lens through which the relationship between somatic symptoms, sedentary behavior and job performance can be analyzed.



Rationale of the study

Sedentary behavior is common at workplace. Sedentary time is estimated by researchers to be 7.7 hours a day. Adults spend more time sitting down at desks, watching television, and traveling to and from work. In the workplace, sedentary behavior is particularly prevalent; office workers spend over 70% of their working hours sitting down. (Biswas et al., 2015). Prolonged sitting for hours on a desk is associated with general health and well-being of employees. A long term sedentary behavior effects heart disease, mental health disorders, and musculoskeletal disorders

Nonetheless, there is a research gap on the specific impact of somatic complaints and sedentary behavior on the job performance of call center workers.

Objectives

1. To determine the relationship between sedentary behaviors somatic symptoms and job performance among call center employees.
2. To find out the effect of demographic variables on study variables.

Hypotheses

H1 Sedentary behavior and somatic symptoms has an impact on job performance.

H2 Sedentary behavior and somatic symptoms has a negative relationship with each other among call center employees.

H3 There would be a gender difference among sedentary behavior and somatic symptoms on job performance among call centers.

METHODOLOGY

Research Design

This research study has a quantitative research design. The goal of this study is to ascertain how call center employees' job performance is affected by their sedentary behavior and physical problems. Data for this study is gathered from Pakistani call center companies. A cross-sectional survey is the one that is utilized. Through Google Forms and email, call center employees were invited to take part in the poll. The current research study is cross-sectional because structural equation modeling was used to evaluate the causal relationship between the constructs—independent variable, dependent variable, mediators, and moderators—and data collection was done just once to test the presented hypotheses.

Sample

The sample will be obtained from call center organizations. Sampling is done using the convenience-based sampling technique. The respondent's information will be kept private and utilized exclusively for research projects related to education. A sample of 300 respondents provided the data. The data is gathered via closed questionnaires that use a Likert scale. The numbers 1 through 5 indicate strong disagreement, 2 strongly disagree, 3 neutral, and 4 agree.

The targeted sample was N= 300 call center employees from an age ranging between 18 to 25 years male and female from diverse backgrounds. Convenient sampling technique was used to collect data and data would be calculated by using G-power.

The sample size of the research study was 300, which was suitable according to the rule of thumb (Sekran, 2003). The survey has to be sent via email and Google Forms, so individual responses to the survey were distributed to 400 people from different organizations. As a result,

300 responses were recorded. Out of the 300 questionnaires, 123 were answered by women, 184 by men and 116 by females. Therefore, the sample size for this study was 300. As pointed out by Cook et al., (2019), a sample size greater than 250 is always suitable for the analysis of private sector studies (Cook, Julious, Sones, Hampson, Hewitt, Berlin, Ashby, Elmsley, Fergusson, Walters, et al., 2019). In academic studies, all respondents were confident that their information would not be disclosed.

Inclusion criteria:

1. Employees who had working in the call center for a certain duration (e.g., at least six months).
2. Individuals who engaged in predominantly sedentary work tasks.

Exclusive criteria:

1. Old Age
2. Employees having history of severe mental illness or substance use
3. Employees taking medication that affect their somatic symptoms

Measurement Instruments

Questionnaires will be used to measure the variables. The close-ended questions have been used in the questionnaire for obtaining the results. Participants will be required to fill out the questionnaire with two sections: demographics variables (gender, age, qualification, and experience), the second section was questions related to **Somatic Symptom Scale**, Scale, sedentary behavior and job performance of employees.

The Somatic Symptom Scale - 8 and it was developed by (Mr Gierk and Dr Löwe 2014) it is self- brief report questionnaire which is use to asses' somatic symptom burden.it Includes 8 items. Which Measures the perceived burden of somatic symptoms. Reliability is 0.81. Higher the score means more somatic symptom burden. The minimal score range from is (0-

3) low (4-7) medium (8-11) high (12-15 points) and very high (16-32) somatic symptom burden. Participants were asked to indicate the extent to which they experienced distress from typical physical symptoms over the past week using a five-point Likert scale. The ratings were then combined to generate a single total score, ranging from 0 to 32 points. The somatic symptom scale (SSS-8) encompasses the following manifestations Digestive issues or problems with the bowels, back pain, pain in the arms, legs, or joints, headaches, chest pain or difficulty breathing, dizziness, fatigue or low energy and sleep difficulties

Rosenberg Sedentary Behavior Questionnaire

In this research study, a scale of Dr. Deborah L. Rosenberg was used. The purpose of the scale is to assess how much time people spend during their daily routines doing sedentary activities like sitting or lying down. Nonetheless, it is a useful instrument for evaluating and tracking patterns of sedentary behavior in studies, interventions, and public health campaigns that encourage physical activity. There were eighteen total things that were completed individually on weekdays and weekends. The reliability is 0.85 for weekday scale and 0.77 for weekend scale. The overall score will convert into hours (response of 15 minutes is recorded as 0.25 and 30 minutes is recorded 0.5) for entire score of performances. Just have to sum the hours per day separately for weekday and weekend items to obtain weekly approximations, weekday hours are multiplied by 5 and weekends hours are multiplied by 2 and summated for total hours per week

Job Performance Scale (JPS)

It was developed by Philip Roth, David Bobko and John McFarland in 1986. The JPS is a widely used measure of job performance that assesses an employee's overall performance across a range of different dimensions, including task proficiency, communication, teamwork and problem solving. The JPS has been used in a variety of different research setting and has

been shown to be a reliable and valid measure of job performance. The job performance Scale has good reliability and validity in a different research setting. The Job performance Scale has been found to have high internal consistency with Cronbach's alpha coefficients ranging from .67 to .94 across different studies. This also suggests that the different items on the scale are measuring the same underlying construct of job performance. The scoring of the scale is straightforward. It consists of 35 items that are rated on a five-point Likert scale, with responses ranging from never to always, the items are grouped into seven subscales that assesses different aspects of job performance, including task proficiency, communication, teamwork, problem solving, initiative, dependability and overall performance to the relevant items, with other scores indicating higher levels of job performance.

Procedures

Data was collected from N=300 males and females from Rawalpindi and Islamabad working in call center. Permission from the participants was taken for the purpose of data collection. The objective of the study was also explained. Informed consent was given to participants and make them clear that it would take 10-15 minutes to fill the questionnaire.

Ethical Consideration

Before starting the questionnaires, participants will first be informed about the aim and goals of this study. They had sign the informed consent form. Participants also can withdraw if they don't want to continue the questionnaire. Ensuring confidentiality and privacy of participant data, and minimizing any potential harm or discomfort to participants during the study. Additionally, to ensure that the study is conducted in an unbiased manner, and that participants are not coerced or pressured into participating. Finally, to ensure the potential implications of the research findings, and ensure that the results are presented in a way that is

accurate and respectful to all participants involved. Their identities were kept confidential and data is collected from the different call center offices.

Statistical Analysis

The statistical analysis procedure initiated with the coding of constructs items is as follows. Data Coding. The research study results were analyzed using SPSS. Formerly starting the analysis, each item of the variable is assigned a particular code for flawless and speedy identification. For example, the items used for sedentary behavior were coded as SD1, SD2, SD3, SD4, SD5, SD6, SD7, and SD8. The items for the Somatic symptoms has been coded as SS1, SS2, SS3, SS4, SS5, SS6, SS 7, SS8, Similarly, the items used for the variable Job performance were coded as JP1, JP2, JP3, JP4, JP5, JP6, and JP7. Then, data were collected and checked for missing values, outliers, and incomplete questionnaires were excluded. Once the coding has been done demographic analysis has been performed. A correlation test has been applied to determine the impact of Somatic symptoms on job performance. Similarly, a correlation test was also performed to analyze the relationship between sedentary behavior and job performance.

Chapter 3

RESULTS

The current chapter explains the results revealed after the statistical analysis of the data collected from the respondents. The data were entered in the SPSS. The incomplete questionnaire, and extreme values responses are excluded from the data. Further data were checked for possible outliers to avoid suspicion in the results. The missing values were also treated carefully before the start of statistical analysis. The results were presented below:

Demographic Characteristics

In the employee demographics, the mentioned category is used to evaluate employee demographics: age and gender.

Table 1 represents that male has 48.7 percent of the participants belongs from the age group of 18-21 and 51.3% belongs from the age group of 22-25.

Table 1 Age of participants (n=300)

	Frequency	Percent	Valid Percent	Cumulative Percent
18-21	146	48.7	48.7	48.7
22-25	154	51.3	51.3	100.0
Total	300	100.0	100.0	

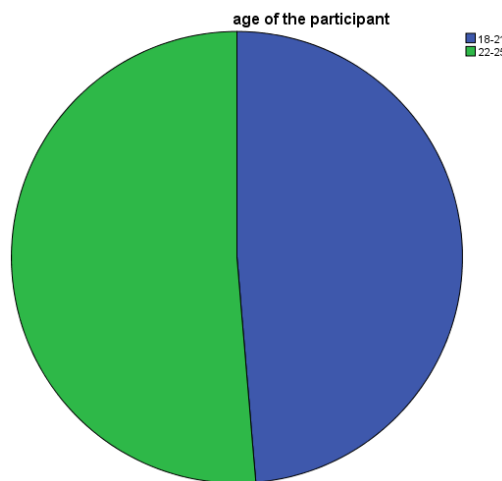
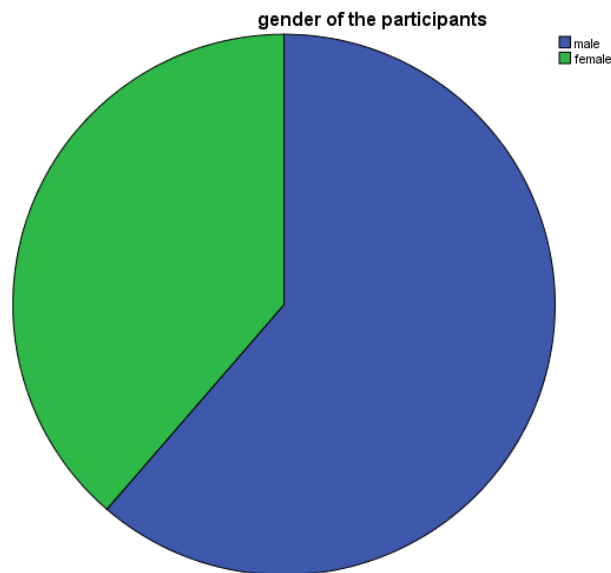


Table 2 represents that 61.3 percent of the participants were male and 38.7 percent of the research participants were female.

Table 2 Gender of participants (n=300)

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	184	61.3	61.3	61.3
Female	116	38.7	38.7	100.0
Total	300	100.0	100.0	



Descriptive Characteristics

Table 3 represent the descriptive statistics which include the variable's minimum, and maximum values related to the constructs, mean, and standard deviation.

It also represents the data Skewness and data kurtosis. The data is collected on five-point Likert scale (1= Strongly Disagree and 5= Strongly Agree) based questionnaire. Likewise, the values of both kurtosis and Skewness are both in the limit i.e. +/-2.

Further, descriptive statistics explained the basic information about the valid responses which may be used in complex statistical analyses to test the hypotheses related to the theoretical framework of the study. The complex statistical analysis comprised correlation analysis among the constructs, regression analysis, mediation, and moderation examination as

well. In fact, descriptive statistics is the first step that is required to be taken in the preparation of the data for statistical analysis. The current study's descriptive statistics represent that data is suitable for the analysis. Moreover, outliers and missing values are also checked before the final analysis. In quantitative analysis, all the results validation is based on the quality of data

Table 3 Descriptive statistics

	N	Min	Max	Mean	SD	Skewness	Kurtosis		
	S	S	S	S	S	S	SE	S	SE
SS	300	12	30	24.03	3.110	-.695	.141	1.117	.281
SB	300	15	30	23.06	3.672	-.171	.141	-.724	.281
JP	300	10	19	13.40	2.210	.542	.141	-.648	.281
Valid N (list wise)	300								

Note: S= Statistics, SS= Somatic symptoms, SB= Sedentary behavior, JB= Job performance, SD= Standard Deviation, SE= Standard Error

The study examines three key variables: sedentary lifestyle, somatic symptoms and job performance each measured using a scale with a sample size of 300. For somatic symptoms the data illustrates a mean score of 24.03, with a negative skew (0.-695) indicates a leftward skew suggesting a tail towards lower scores. The kurtosis of 1.117 indicates a distribution slightly flatter than normal.

Sedentary Lifestyle showcases a mean score of 23.03. The distribution with kurtosis of -.724 indicates a slight leftward skew. SL actual scores range from 9 to 36 with a potential range from 15 to 30. The kurtosis of 0.-724 indicates distribution slightly flatter than normal.

Job performance presents a mean score of 13.40, the positive Skewness of 0.542 indicates a rightward skew. The kurtosis of -0.648 indicates a distribution slightly flatter than normal. Actual scores range from 10 to 20 with a potential range from 10 to 19.

Reliability Statistics

Cronbach's alpha is a method of determining reliability by comparing the amount of shared variation, or covariance, among the items comprising an instrument to the total variance.

Table 4 Reliability Statistics

	α	N of Items
SS	.595	8
SB	.566	8
JP	.644	10

Note: SS= Somatic symptoms, SB= Sedentary behavior, JB= Job performance, α =

Cronbach's alpha

The study's reliability investigation is depicted in Table 4. Each variable's Cronbach's alpha value is shown in the table. The results highlight the independent variable's Cronbach's alpha value. The Cronbach's alpha value for job performance was .644, suggesting that the variable's question is valid and has excellent stability. Cronbach's alpha for sedentary behavior was .566, suggesting that the variable's question is valid and reliable. Cronbach's alpha for somatic symptoms is .595, suggesting that the variable's question is both valid and reliable.

Correlation Analysis

A correlation test was used to determine the relationship between two variables. A relationship between two variables can either be positive, negative or zero.

Table 5 Correlation Analysis

		SS	SB	JP
SS	Pearson Correlation	1	.416**	-.265**
	Sig. (2-tailed)		.000	.000
	N		300	300
SB	Pearson Correlation		1	.073
	Sig. (2-tailed)			.209
	N			300
JP	Pearson Correlation			1
	Sig. (2-tailed)			
	N			

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

Note: SS= Somatic symptoms, SB= Sedentary behavior, JB= Job performance

Table 5 shows the correlation between somatic symptoms, sedentary behavior and job performance. The Pearson correlation ($r=-.265$) between somatic symptoms and job performance. A negative correlation exist between somatic symptoms and job satisfaction. It means that as somatic symptoms increases job performance of call center employees started decreasing. The correlation analysis was performed at a significance value of 0.01. The significance values between somatic symptoms and job performance is <0.01 . The Pearson correlation of sedentary behavior with job performance $r= 0.73$. However $p=.209$ between sedentary behavior and job performance. It means that there exist no relationship between sedentary behavior and job performance. Therefore, H_1 is rejected as there exist a negative relationship between somatic symptoms and job performance. Moreover, there exist no relationship between sedentary behavior and job performance. The Pearson correlation $r= .416$ between somatic symptoms and sedentary behavior. The p-value between sedentary behavior and somatic symptoms is <0.01 therefore it can be said that there exist a positive correlation between somatic symptoms and sedentary behavior. Therefore, H_2 is also rejected as there exist a significant positive relationship between somatic symptoms and sedentary behavior.

Independent T Sample Test

The Group Statistics table, provides basic information about the group comparisons, including the sample size (n), mean, standard deviation, and standard error for mile times by group. With group statistics, one or more independent variables are divided into subgroups and unilabiate statistics are calculated within each subgroup. In this research study, 184 participants were male and 116 were female.

Table 6 Group Statistics

	Gender of the participants	N	M	SD	Std. Error Mean
SS	male	184	24.28	2.713	.200
	female	116	23.64	3.632	.337
SB	male	184	23.76	3.690	.272
	female	116	21.96	3.374	.313
JP	male	184	13.46	1.953	.144
	female	116	13.30	2.571	.239

Note: SS= Somatic symptoms, SB= Sedentary behavior, JB= Job performance, M-mean, SD= standard deviation

The t-statistics of sedentary behavior is 4.261 with a degree of freedom of 298. The significance value of sedentary behavior is less than 0.05 therefore it is concluded that the difference of means of sedentary behavior between males and females is different from 0. The t-statistics of somatic symptoms is 1.739 with a degree of freedom of 298. T-statistics of job performance is .590 with a degree of freedom of 298. The p value of somatic symptoms and job performance is >0.05 therefore it can be concluded that the difference of means of somatic behavior and job performance between males and females is not different from 0.

Table 7 Independent Samples Test

		Sig.	t	df	Sig. (2-tailed)
SS	Equal variances assumed	0.17	1.739	298	.083
	Equal variances not assumed		1.631	194.98	.105
SB	Equal variances assumed		4.261	298	.000
	Equal variances not assumed	.494	4.348	260.69	.000
JP	Equal variances assumed		.590	298	.555
	Equal variances not assumed	.000	.555	197.401	.579

Note: SS= Somatic symptoms, SB= Sedentary behavior, JB= Job performance, M- mean, SD= standard deviation

Chapter 4

DISCUSSION

The purpose of this study was to determine the impact of sedentary and somatic symptoms on call center employees. In this research study a sample of 300 employees working in call centers has been collected. The questionnaire was based on Somatic symptoms, sedentary behavior and job performance. In this research study it was found that sedentary behavior has no direct impact on job performance. The results of this research study is in contradiction with the study of Wilkerson et al., (2018) in which it was found that sedentary behavior has a direct impact on job performance particularly on jobs that require focus and analytical thoughts (Wilkerson et al., 2018).

The data was collected by distributing questionnaire in call centers. The number of item of sedentary behavior were 8 and the number of items of somatic symptoms were 8. These items were developed from well-recognized journals. The number of item in job performance were 10. According to the current study, the reliability of somatic symptoms, sedentary behavior and job performance is .595, .566 &.644 consecutively.

In this research study there were three major hypotheses. The first hypothesis stated that there would be a positive impact of sedentary behaviors and somatic symptoms on job performance. This hypotheses was rejected as it was found that a negative correlation exist between somatic symptoms and job performance. A research study was conducted by Platts et al., (2022) to determine the impact of sedentary symptoms impact on job performance on labor. Platts et al., (2022) has found that labors usually remain active throughout the day and hence their productivity and job performance level remains up to the expectation. Platts et al., (2022) did not found any relationship between sedentary behavior and job performance among labor working in the construction companies (Platts et al., 2022).

The second hypothesis was that there would be a negative relationship between sedentary behavior and somatic symptoms among call center employees. A research study was conducted by reference to determine the somatic behavior among employees working as data entry clerk. The results of reference study further revealed that clerks usually sit in a stationary posture that leads to muscle pain, headaches and shoulder pain that effects their job performance. A similar study was conducted by Peter et al., (2019) to determine the impact of somatic symptoms on target oriented jobs. Peter et al., (2019) found that employees have to visit healthcare professionals for the treatment of somatic symptoms. Peter et al., (2019), has found that employees have to take off from the work that effects their sales target. According to Williams et al., (2014) employees have to take multiple leaves to deal with somatic symptoms (Williams et al., 2014).

The third hypothesis was that there would be a gender difference among sedentary behavior and somatic symptoms on job performance among call centers. It was found that there exist a significant difference between the impact of somatic symptoms among men and women on job performance.

Primarily there were two research objective of this research study. The first objective was to determine the relationship between sedentary behavior somatic symptoms and job performance among call center employees. The second research objective was to find out the effect of demographic variables on study variables. According to prolonged periods of inactivity or sedentary living are associated with several health risks, such as heart disease, diabetes, obesity, and musculoskeletal problems. In addition to increasing absenteeism and lowering productivity, poor health can also increase healthcare costs for both employers and employees (Lavie et al., 2019). Huibers et al., (2003) has conducted a study to determine the impact of somatic symptoms on the employees working in administration positions. Huibers et al., (2003) has found that muscles tension, in neck and shoulder that results from poor posture

and stress makes it difficult for the individuals to maintain proper postures for the task. Therefore, the individuals might not be able to perform their duties in an efficient manner (Huibers et al., 2003).

According to Alòs et al., (2022) Individual may feel fatigue, low energy level and anxiety due to sedentary issues (Alòs et al., 2022). A research study of Colomer et al., (2022) has found that job in which employees keeps sitting for extended hours experience low motivation and productivity (Colomer et al., 2022). A research study of Friedenreich et al., (2021) has found a direct relationship between stress, anxiety and depression (Friedenreich et al., 2021). Reference has found that Tremblay et al., (2017) has found a negative impact of sedentary behavior on mental health of employees. Tremblay et al., (2017) has also found that sedentary behavior has also found that sedentary behavior negatively effects morale, job satisfaction and performance of employees (Tremblay et al., 2017). A similar study was conducted by Thivel et al. (2018), and found that sedentary behavior reduces critical thinking abilities of employees that effects their performance level. Fazzi et al. (2017) has recommended that solitary tasks are essential for the workers to keep them motivated that raises collaboration among employees and ultimately leads to high performance level (Fazzi et al., 2017).

It was found in this research study that the relationship between somatic symptoms, sedentary behavior and job performance is negative. The results of study are contrary to the results found by the study of Groen et al., (2021). Groen et al., (2021) has found that somatic symptoms are headache, tension in muscles and gastrointestinal problems that effects the overall productivity of employees. These symptoms reduces focus and concentration on work that effects the job performance of employees (Groen et al., 2021). Another research study of Chen et al., (2022) has found that somatic symptoms effects productivity and errors in work. A low productivity at work effects the overall performance of employees (Chen et al., 2022).

Henningsen, (2018) found that headache ranges from mild to severe pain that makes it challenging for the employees to focus on the work (Henningsen, 2018).

According to Hoedeman et al., (2010) Somatic experiences makes it difficult for employees to concentrate on their work. (Hoedeman et al., 2010). According to Ryu & Park, (2023) sustaining pain or suffering can interfere with one's ability to focus on tasks linked to their job, which can result in mistakes, omissions, and work that is incomplete (Ryu & Park, 2023).

Olafsen et al., (2021) has conducted a study to determine the impact of physical discomfort among employees effects the overall productivity of employees (Olafsen et al., 2021). Pain and anxiety affect ability of employees to think clearly that raises the chances of making errors at work.

The descriptive statistics for sedentary behaviors RSD, somatic symptom (SS8) and job performance (JPS) suggest a significant positive correlation between sedentary behaviors and job performance (RSD and JPS $r = 0.416$). This result aligns with the expectation that prolonged periods of sedentary activities may impact physical well-being and, consequently, influence job performance positively.

Contrary to Hypothesis 2, the study did not find a negative relationship between sedentary behavior and somatic symptoms. Instead, the correlation coefficient between RSD (sedentary behaviors) and SS8 (somatic symptoms) was slightly negative ($r = -0.265$), suggesting a weak negative association. Further exploration of this unexpected relationship is warranted to understand the nuanced interplay between sedentary behaviors and somatic symptoms among call center employees.

The analysis determined potential gender differences in the relationships between sedentary behavior, somatic symptoms, and job performance. While the tables provide a

foundation for understanding the distribution of gender and age in the dataset, a detailed analysis is required to draw robust conclusions regarding how these factors may interact with sedentary behaviors, somatic symptoms, and job performance.

Conclusion

The purpose of this research study was to determine the impact of somatic symptoms, sedentary behavior and job performance. A negative correlation exist between somatic symptoms and job satisfaction. It means that as somatic symptoms increases job performance of call center employees started decreasing. It means that there exist no relationship between sedentary behavior and job performance. Moreover, there exist no relationship between sedentary behavior and job performance. It can be said that there exist a positive correlation between somatic symptoms and sedentary behavior.

This study is from Pakistan's twin cities (Islamabad and Rawalpindi) only and presents the problem of generalization as a limitation in connection with this study. Time constraints were another limitation as the staff was very busy; there was very little time to think and fill out questionnaires and to cope up to meet project deadlines. Another detail of this study was that the survey is based on honesty. This technique is common among respondents and aware of personal feelings and behavioral tendencies.

However, future research could be conducted on perspectives including employees from industries other than call centers to increase reliability of the study. This study was performed only on call centers. Future studies could focus on other departments also software houses. Other industries and services such as construction should be considered for research in the future.

The study specifically focuses on call center employees, which limits the generalizability of the findings to this specific population. The job demands, work

environment, and organizational culture in call centers may differ from other industries or professions. The response rate of participants and the overall sample size could impact the generalizability and statistical power of the study. If the response rate is low or the sample size is small, it may limit the representativeness and reliability of the findings. The study focuses on sedentary behavior and somatic symptoms, there may be other factors that influence job performance among call center employees. There may be external factors that influence sedentary behavior, somatic symptoms, and job performance that are beyond the scope of your study. For example, participants may have personal or health-related factors that affect their sedentary behavior or somatic symptoms. It may be challenging to control or account for all these external factors, potentially introducing confounding variables.

Implications

The purpose of this study was to determine the relationship of sedentary behavior and somatic symptoms on job performance. This research study will provide adequate information to business organizations regarding somatic symptoms and sedentary behavior. Through the use of this research study results, the leadership and management of business organizations are better able to create strategies for the employees. Researchers will find this work to be beneficial as well. Since no other study has yet looked into the relationship between these variables, it will provide theoretical understanding of the relationships between the variables used in the current study. The current study is crucial since it explains how parents should raise their kids from the beginning to prevent problems that could later negatively impact the child's life. Future research can benefit from this study since it will offer a fresh perspective and point of view, enabling researchers to continue examining these variables with a larger sample size and in understudied cultural contexts. The results of this study will not only be beneficial for the management and leadership of call centers but this study is also beneficial for the organizations

in which most of the employee's remains stationary at workplace. Organization gives too much consideration to productivity of employees.

The thesis topic could be that call center employees who engage in more sedentary behavior may experience more somatic symptoms, which could negatively affect their job performance. Additionally, the research highlighted the importance of promoting healthy habits and reducing sedentary behavior in the workplace to improve employee health and productivity. Association between these factors and job performance, findings can contribute to promoting employee wellness and encouraging organizations to prioritize strategies that mitigate sedentary behavior and address somatic symptoms. This study is a pathway to the development of interventions aimed at reducing sedentary behavior and managing somatic symptoms in call center settings. To inform policies related to workplace health and wellness programs, which can help reduce the prevalence of sedentary behavior and somatic symptoms among call center employees. The research can also contribute to the growing body of knowledge around the impact of sedentary behavior on health outcomes and job performance.

Future Recommendations

In future, a large sample size can be taken to bring more reliability and authenticity in the results. Moreover, the results of this research study can only be generalized to the call center industry. In future, different industries will be taken into consideration to determine the impact of somatic and sedentary behavior on job performance.

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APPENDICES



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August 7, 2023

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms. Arooba Sajid, registration number BSP201030 is a bona fide student in BS Psychology program at this University from Spring 2020 till date. In partial fulfillment of the degree, she is conducting research on "Association of sedentary behavior and somatic symptoms on job performance among call center employees". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

Dr. Sabahat Haqqani
Head, Department of Psychology
Ph No. 111-555-666 Ext: 178
sabahat.haqqani@cust.edu.pk

INFORMED CONSENT

I am a B.S student in the Capital University Sciences and Technology, Islamabad. I am currently doing research on the topic Association of Sedentary Behavior and Somatic Symptoms on Job Performance among Call Center Employees of which is the requirement of my degree. If you volunteer to participate in this research your identity will be kept confidential. Your name will not be used in the report. When the study is completed, findings will be presented in summary form and the list will be destroyed.

Your participation in this study is voluntary. You have the right to say no, but it would be a great contribution and help to this research if you participate and give your honest responses.

Please contact if you have questions about the study

Email at: aroobq6@gmail.com

Signature: _____

Date: _____

DEMOGRAPHIC INFORMATION SHEET

Name:

Age:

Gender:

Relationship with close friends

- good
- moderate
- poor

SCALE – 1 SOMATIC SYMPTOM SCALE SS8

Read each statement carefully and chose which one of five possible responses. There are no right or wrong answers. We are just interested in your views. Using the scale below, please indicate the extent to which you agree or disagree with each of the following statements by writing the number that corresponds to your opinion in the space next to each statement. For each of the statements below, please consider your personal feelings. Determine how often, in general, the following experiences happen to you. Just give your gut response. Use the scale: 1 = Hardly ever to 7 = Almost always. Please read each statement carefully. During the past 7 days, how much have you been bothered by any of the following problems?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

	Items	1	2	3	4	5
1	stomach or bowel problems					
2	Back pain					
3	Pain in your arms, legs or joint					
4	Headaches					
5	Chest pain or shortness of breath					
6	Dizziness					
7	Feeling tired or having low energy					
8	Trouble Sleeping					

SCALE -2 ROSENBERG SEDENTARY BEHAVIOR

Read each statement carefully and indicate to what extent each of the following items corresponds to the reasons why you are presently involved in your work. There are no right or wrong answers. We are just interested in your views. On a typical WEEKDAY, how much time do you spend (from when you wake up until you go to bed) doing the following?

Rarely never/Never	Occasionally	Often	Almost Always/Always
1	2	3	4

	Items	1	2	3	4
1	On a typical WEEKDAY, how much time do you spend (from when you wake up until you go to bed) doing the following?				
2	Playing computer or video games.				
3	Sitting listening to music on the radio, tapes, or CDs.				
4	Sitting and talking on the phone.				
5	Doing paperwork or computer work (office work, emails, paying bills, etc.)				
6	Sitting reading a book or magazine.				
7	Playing a musical instrument.				
8	Doing artwork or crafts.				
9	Sitting and driving in a car, bus, or train.				

SCALE- 3 JOB PERFORMANCE SCALE

Yes	No
1	2

	Items	1	2
1	I am self-Motivated Person		
2	I enjoy my work		
3	I am well trained in my work		
4	I am clear about my duties and responsibilities		
5	I am willing to accept my faults		
6	I receive the respect I deserve from my colleagues		
7	I tend to see problems as challenge rather than obstacles		
8	the reward for success is greater than the penalty of failure		
9	the superior encourages me at work		
10	I always receive positive feedback from my employees		

You can find detailed information about Children, Youth, and Families At-Risk by visiting the [University of Minnesota's](#) website.

Where Can I Attain Permission to Use the RSES?

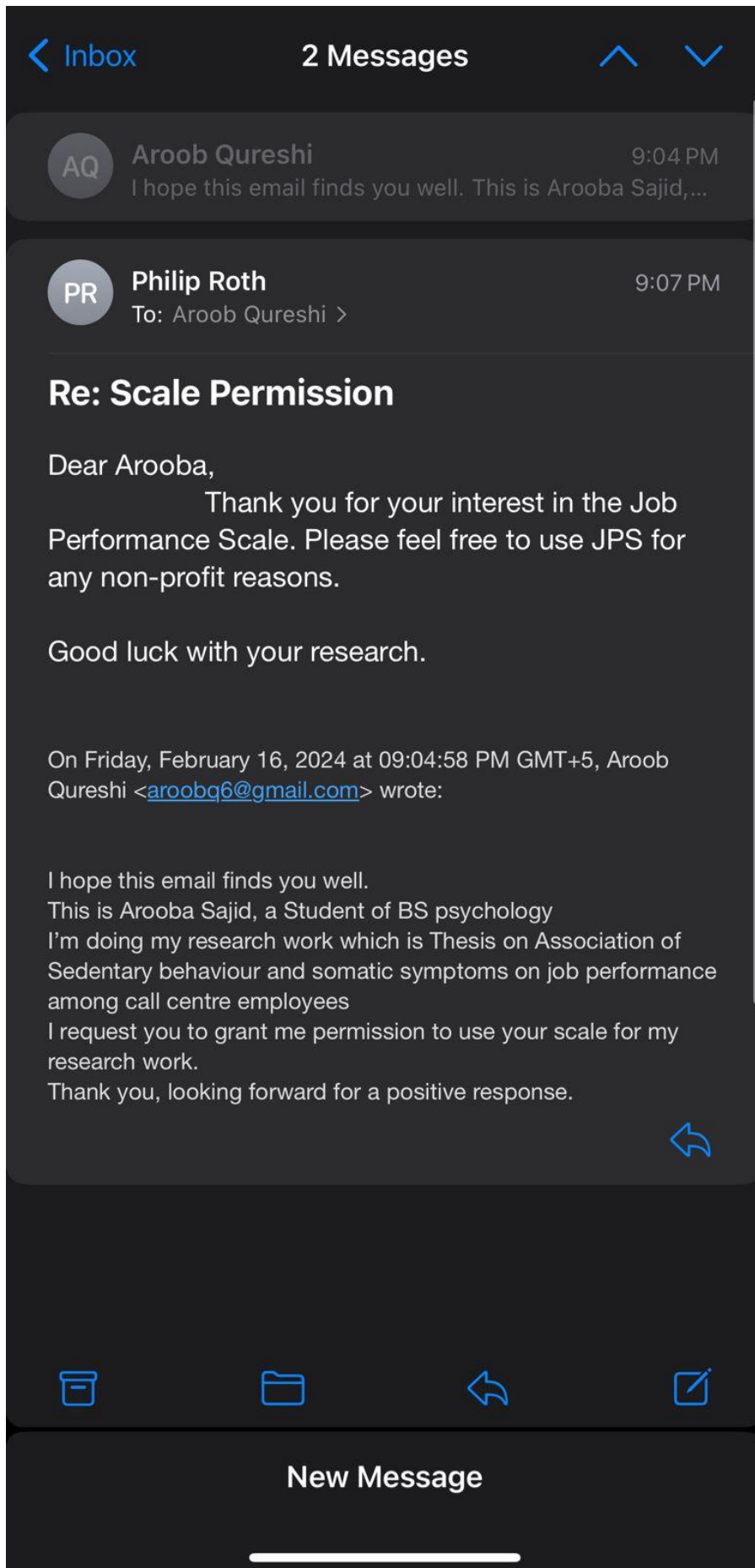
The best way to obtain permission to use the scale is via the University of Maryland's website. In short, it reads:

“There is no charge associated with the use of this scale in your professional research. However, please be sure to give credit to Dr. Rosenberg when you use the scale by citing his work in publications, papers, and reports. The Rosenberg Self-Esteem Scale may be used without explicit permission. However, the Rosenberg family would like to be kept informed of its use.”

Note that there also is a link to a form that you can complete.

A Look at Measuring Low Self-

 positivepsychology.com



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Translation, cultural adaptation and validation of the Somatic Symptom Scale-8 (SSS-8) for the Brazilian Portuguese language

[Camila Fernandes Pollo](#) , [Silmara Meneguim](#),
... [César de Oliveira](#) [+ Show authors](#)

[BMC Primary Care](#) **23**, Article number: 222
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Abstract

Background

Assessment tools are commonly used in different fields of health to assist in the diagnosis, the evaluation of the response to treatment, the
