

Health Hazards in Online Organizations: A Case Study about Two Business Organizations in Pakistan

Muhammad Abid Malik ¹, Sameen Azmat ²

¹ Beaconhouse National University, Lahore, Pakistan, Contact Email: m_abidmalik7@yahoo.com, ORCID: 0000-0002-7676-3034; ² Virtual University of Pakistan, Lahore, Pakistan.

Abstract: Online organizations usually have a more stressful working style where the employees have to sit in front of computers for long hours. This sit-and-stare culture coupled with a lack of organizational focus on the employees' physical health and well-being may lead to multiple health issues. Taking data from two online business organizations in Pakistan through observations and interviews; this study investigates the working culture and environment, common issues pertaining to the employees' physical health, and the responses of the management. It was found that the working conditions were mostly stressful and detrimental to physical health with cramped spaces, non-ergonomic furniture, and a stressful and tightly-controlled environment. The participants believed that they were treated like expendable commodities. Eyes, back, neck, knee and stomach issues, fatigue, and obesity were reported to be the most common health issues. The study gives practical recommendations which can improve not only the employees' physical well-being, but also their organizational attachment, efficiency, and productivity.

Keywords: Online organizations, Health hazards, Health issues, Work environment, Working style.

Riscos à saúde em organizações on-line: um estudo de caso sobre duas organizações comerciais no Paquistão

Resumo: As organizações on-line geralmente têm um estilo de trabalho mais estressante, onde os funcionários precisam ficar sentados em frente aos computadores por longas horas. Essa cultura de sentar e olhar, aliada à falta de foco organizacional na saúde física e no bem-estar dos funcionários, pode levar a vários problemas de saúde. Tomando dados de duas organizações de negócios online no Paquistão por meio de observações e entrevistas; este estudo investiga a cultura e o ambiente de trabalho, questões comuns relacionadas à saúde física dos funcionários e as respostas da administração. Constatou-se que as condições de trabalho eram em sua maioria estressantes e prejudiciais à saúde física, com espaços apertados, móveis não ergonômicos e ambiente estressante e rigidamente controlado. Os participantes acreditavam que eram tratados como mercadorias descartáveis. Problemas de olhos, costas, pescoço, joelho e estômago, fadiga e obesidade foram relatados como os problemas de saúde mais comuns. O estudo fornece recomendações práticas que podem melhorar não apenas o bem-estar físico dos funcionários, mas também seu vínculo organizacional, eficiência e produtividade.

Palavras-chave: Organizações online, Perigos para a saúde, Questões de saúde, Ambiente de trabalho, Estilo de trabalho.

1. Introduction

The workplace environment is an important component of employees' life as they spend a substantial part of their life at work (Kamarulzaman et al., 2011). A person generally spends 6 to 9 hours a working day at the workplace (Malik et al., 2020). Working style and environment can affect employees physically, mentally, emotionally, and psychologically. Literature indicates that those employees who are satisfied with their work and working environment, perform better (Iaffaldano & Muchinsky, 1985; Kamarulzaman et al., 2011; Shaju & Subhashini, 2017). Previous studies have mentioned several environmental factors such as working and sitting styles, noise, color, temperature, workplace design, and use of different tools and gadgets that influence employees' physical health, performance, and well-being (Kamarulzaman et al., 2011; Chao et al., 2013; Torres & Zhang, 2021).

Not only is it an age-old adage that a healthy body has a healthy mind, but research also supports it (Hodgins, 1992; Schaefer et al., 2006). A person, who is physically fit and active, performs a lot better at work (Donoghue, 1977; Grimani, Aboagye & Kwak, 2019). A positive, conducive, and healthy working style and environment are thus essential as employees would stay fit and healthy in it, resulting in better workplace performance and improved organizational productivity (Kamarulzaman et al., 2011).

The workplace environment consists of physical and social aspects (Hafeez et al., 2019). A conducive and productive working environment is one that not only has a positive sociological, psychological and behavioral environment; but also a comfortable, healthy, and relaxing physical one. Any working environment which is physically uncomfortable, stressful, or harmful in any way, may hamper employees' pace of mind, and level of productivity (Park, 2007).

In recent decades, online and digital technologies have started to dominate the working style and workplace environment across different sectors of life. The world is fast moving towards Industry 4.0 and society 5.0 (Akkaya et al., 2021). Workplaces, offices, and business organizations are ditching traditional, face-to-face modes for a technology-infused, online one. Whereas in the past employees would sit in front of the tables, work on files, and move from person to person or place to place; now they mostly sit statically in front of computers, and work and interact through them (Malik et al., 2020). This new working style and environment have greatly reduced physical mobility and movement as most of the time employees have to simply sit in their seats and stare at the computer screens. Apparently, this sit-and-stare culture in online organizations has been causing a lot of health issues for employees.

Although there has been a lot of research on online work culture, digitalization, and their impact on employees' job performance, efficiency, and motivation (Korzynski, 2013; Jääskeläinen, 2015; Bâtiz-lazo, 2016); not a lot has been done about the health hazards caused by the online working style and environment. This study tries to reduce some of this research gap by researching about two online business organizations in Pakistan to investigate their working style and environment, and the health hazards caused by them. Health hazards can be of many types e.g. psychological, mental, emotional and physical; however, the current study only focuses on the hazards affecting the physical health of the employees.

1.1. Research Questions

The current study is based on the following key research questions.

1. What are the working styles and environments in online business organizations?
2. What kind of physical health hazards are caused by online working style and environments?
3. How have business organizations responded to tackle physical health-related issues in an online working environment?
4. How can physical health hazards be reduced in online organizations?

2. Literature Review

The literature review for this study is divided into two main parts: the role and importance of employees' physical health and its role in organizational working style and environment; and physical health hazards associated with online working style and environment.

2.1. Role and Importance of Working Environment and Employees' Physical Health in Work Efficiency and Productivity

Environment means surroundings and all those things that influence human beings. A working environment is where people work to fulfill organizational goals. The work environment may also be taken as a place where work is done. Consequently, the working environment includes physical location, surroundings, and other aspects such as ventilation, furniture design, lighting, calmness, noise, and interaction with other people. (Awan & Tahir, 2015; Eberendu et al., 2018).

Working style and workplace environment are very crucial to the well-being and productivity of employees. Literature suggests that the majority of work-related problems and issues arise from working style and workplace environment (Awan & Tahir, 2015; Hafeez et al., 2019). If organizations want to maximize their employees' productivity and institutional attachment, they must provide them with a comfortable, relaxing, and conducive working environment.

Working style and environment (both physical and social) play a crucial role in the health and productivity of the employees (Tint et al., 2014). Working style and physical environment are as important as the social one. If the working style and physical environment (e.g. air quality, lighting, space, seats, and seating arrangement) are stressful in any way, it is likely to affect employees' physical health, peace of mind, and eventually productivity. A Healthy and safe working environment is a major challenge in especially developing countries (Thobaben & Woodward, 1996; Pratap, Bose & Kumar, 2021).

Employees usually work better in a workplace with physical comfort. Organizations that have a better workplace environment and fulfill the needs of the employees, tend to have higher productivity (Hameed & Amjad, 2009). Research suggests that physical infrastructure and the design of an office have a strong and positive relationship with employees' productivity (Naharuddin & Sadegi, 2013). Lighting, spatial arrangement, noise, type of furniture, and temperature also influence employees' productivity (Hameed & Amjad, 2009). Ramalakshmi et al. (2020, p.371) said that employees "put their heart and soul into the organization if the work environment is smooth and comfortable". Tint et al. (2014) concludes that badly designed buildings and uncomfortable furniture can cause stress, anxiety, and lower level of productivity. Haynes (2008) argues that improved

workplace design and environment can enhance employees' productivity by five to ten percent.

In many developing countries like Pakistan, workplace environment and employees' physical health are often overlooked (Hameed & Amjad, 2009). Many organizations especially private ones look for short-term policies and benefits. Their focus is more on saving money through cutting down facilities and providing substandard infrastructure. This attitude often results in increased physical health hazards for the employees and decreased motivation levels, institutional attachments, and productivity.

2.2. Physical Health Hazards associated with Online Working Style and Environment

With the advent of computers, the internet, and other digital media; the world is turning into a technology-infused, digital world (Malik et al., 2020; Warner et al., 2021). It has also influenced and changed the work culture and working style in many business organizations, especially those which are working online. Compared to the earlier times when employees had to sit at the table and look at the files, now they have to stare at the screens continuously. Studies have proven that looking at the screens puts extra stress on the eyes (Tucker, 2018). Online working also deprives employees of many natural breaks that they would have in a conventional mode (Joyce et al., 2018). Malik et al. (2020) found that people working in online organizations have less physical mobility and activities. Most of the people working in online business organizations have to sit for long, continuous hours working with computers. This prolonged period of immobility often leads to multiple physical problems and issues such as obesity, back and joint issues, and decreased stamina and vitality (van Uffelen et al., 2010).

Multiple studies have indicated perils associated with computer-dependent work (Vaughan, 2016.). Research shows that continuously working on computers leads to multiple health issues such as joint and back pain, shoulders and back issues, and most importantly deterioration of eyesight (Tucker, 2018). It may also lead to physical and mental fatigue and stress (Sanjith & Kumar, 2011). Long and continuous working hours with computers can also cause musculoskeletal disorders. While conducting a study about software developers in the USA and India, Kelloway et al. (2013) also found the adverse effects of online, computer-dependent jobs on the physical health of employees.

Uncomfortable furniture and cramped space may also contribute to physical health hazards, decreased productivity, and workplace anxiety (Kamarulzaman et al., 2011). In online organizations, the space is often more limited and cramped as a sizeable portion is dedicated to system units, monitors, keyboards, and other accessories. All these factors contribute to heightened physical health hazards with online working style and environment.

3. Research Methodology

3.1. Research Method and Approach

The current study uses case study approach within qualitative research method. Case studies are used when the researcher is seeking more focused and in-depth analysis (Dul & Hak, 2008). According to Yin (2014), case studies are suitable when one is seeking the answers to "how", "why", "what" and "who".

More specifically, this study uses an exploratory case study design. It is used when very little or nothing is known about the phenomenon, or it is too complex to be explored through surveys or questionnaires (Dul & Hak, 2008; Yin, 2014). It usually answers "what"

and “why” (Dul & Hak, 2008). As there are no predetermined outcomes in the current study, and the researchers are seeking answers to “what” (What are the physical health hazards associated with online working style and environment?) and why (Why do the employees face increased physical health hazards in online business organizations?); this design was considered the most suitable for this study.

3.2. Cases and their Context

This study is designed to investigate physical health hazards faced by the employees of online business organizations. In this study, online organizations are those organizations in which the employees have to work extensively with computers in regular office hours. That work can be of any type: file management, record keeping, interacting and communicating, consulting, or any other; but it has to be done through the computers. Two organizations were selected for the study which met the above criteria. Both organizations worked online, and the employees had to sit and work with computers during the working hours.

One of them, an online business organization (coded OBO1 hereafter), is an online service-providing company, situated in Lahore, Pakistan. It uses a two-story building in one of the posh areas of the city as its main office. At the time of data collection, OBO1 had been working for the last seven years in that sector with a staff of 50 people.

The second online business organization (coded OBO2 hereafter) is an import-export company. It is a very big company with multiple branches which deal with different aspects of its business (transportation, stores, field purchasing offices, etc.). The place which is the focus of attention in this study is its head office where the employees work online to maintain accounts, give and take orders, and coordinate with other stores and field offices. This company had rented one whole floor in a plaza for its activities.

Both of the organizations have an online working style, environment, and culture where employees have to sit in front of computers and work for eight working hours a day (five days a week in OBO1, and six in OBO2).

3.3. Participants of the Study

To ensure that the participants had long enough experience to feel the impact of online working style and environment, only those employees were selected who had at least three years of experience in their current organization. In this qualitative study, data is collected using purposive sampling method. Within purposive sampling method, maximum variation sampling technique was used to ensure that the data from participants with a diverse background are gathered (Patton, 2002). Their commonality was working in online business organizations with a minimum of three years of experience, and diversity was in their age, gender, and experience.

In OBO1, out of 50 employees, 23 did not meet the experience criteria. Out of the remaining 27 employees, 6 were selected with equal gender representation (three males and three females). In OBO2, 18 out of 30 employees were excluded for the same reason. Out of the remaining 12 employees, five were selected for the study (three males and two females). As a result, data were gathered from 11 employees.

In qualitative research, the focus is not on the sample size, but on data saturation (Patton, 2002). Data saturation was reached after nine interviews; however, two more interviews were carried out to further ensure it.

3.4. Research Tools and Data Collection Techniques

Two of the most commonly used tools for a case study are observations and interviews (Patton, 2002). The researchers decided to use them due to their relevance and significance. Observations allow the researchers to directly observe the phenomenon. Non-participatory observations were used so that the researchers could uninterruptedly focus. Both of the observations were carried out by one of the researchers. Each observation was conducted for a period of 15 days. On average, one observation lasted for four hours and 32 minutes. Field notes and observation forms were used to collect the data.

For interviews; semi-structured, one-to-one interviews were used as they allow for further probing (Patton, 2002). Four participants agreed to face-to-face interviews while the rest opted for telephonic interviews. Interviews were carried out in a mixture of Urdu and English languages. They were audio recorded as per research protocol.

An interview guide was developed by one of the researchers which was initially checked and validated by the other. Later it was sent to four experts in the fields of management sciences and qualitative research for content validity through expert opinion. Some of the questions and words were modified as per their feedback. The final interview guide consisted of six key interview questions: about working styles and environments in the online organization, their comparisons with conventional organizations, physical health issues in online organizations, physical health issues they faced, responses of the online organization to those issues, and suggestions to improve this situation.

3.5. Data Analysis Techniques

Both observational and interview data were analyzed qualitatively. Observation notes were used to find general settings, seating arrangements, working styles, environments, and any major incident pertaining to the research objectives.

Interview data was first transcribed and then translated (where needed). Data were analyzed using the technique suggested by Marshall and Rossman (2006). One of the researchers did the initial coding. Those codes were placed under existing and emerging themes. Some of those themes were combined or collapsed for further clarity. In the end, those themes were put under the main categories. This whole process was carried out through MS Word as suggested by Malik et al. (2020). Verbatim quotations were also used frequently for conveying the participants' feelings more clearly.

3.6. Ethical Considerations

For observations, permissions were sought from the managers beforehand. On the first day, the researcher who conducted observations had a brief meeting with the participants in which the research objectives and the process was explained. The participants were assured that their names and identities would not be revealed to anyone, nor be used for any purpose other than the said research.

For interviews, the interviewees were individually asked for permission. They were also assured about their anonymity, data security, and right to withdraw from the study at any time.

4. Data Findings and Analysis

Data findings and analysis are divided into two main categories: observational data findings and analysis, and interview data findings and analysis. Observational data are

presented for the two cases so that their context, working styles, and environments could be understood better; while interview data is presented under the main themes.

4.1. Observational Data Findings and Analysis

Findings and analysis of observational data for each case are given as under.

4.1.1. Case 1: OBO1- An Online Services Provider

One of the researchers conducted observations at OBO1 for a period of 15 days. Although the office timings were 9:00 a.m. to 5:00 p.m., employees would usually leave at 5:30 p.m. There was one-hour lunch break from 1 p.m. to 2 p.m. Fifteen observations were carried out before the lunch break while ten after it. Most of the employees would go out for lunch, but some would stay at their workplace for it. Usually, the male employees would go out, while the females would stay at their workplace.

Employees had very small cubicles (4' * 4' 6") which hardly allowed them enough room to even stretch their legs fully. Those cubicles were five feet high and could be closed from all four sides. They were open from the top, allowing them to be lit up and cooled through ceiling lights and air-conditioners. There was no retiring place where the employees could stretch their bodies, rest or relax for a while. Even for lunch, they would either go outside or take in their cubicles.

It was observed that normally the employees would stay in their seats for the entirety of their working hours. Even when they did not have any official work to do, they would open any website, watch videos or read materials on their computers. It was repeatedly observed that when any of the top management came out of their offices, all the employees would rush back to their seats to look busy. It gave the impression that the top management did not appreciate if any employee was going to anyone else to talk, or would stay out of their cubicles. The whole working environment gave the impression of a very tightly controlled workplace.

The participants were often observed stretching their necks, backs, and legs as if they had become stiff. They would also put their hands on their eyes and rub them quite frequently, giving the impression of eye fatigue and strain. Some of them would limp for a while after walking out of their cubicles at the off time, sometimes holding their knees. The body language of most of the employees indicated that they were under physical stress and discomfort.

4.1.2. Case 2: OBO2- An Online Business Organization

Fifteen observations were carried out at OBO2. A working day at OBO2 would start at 9:30 a.m. and end at 5:30 p.m. with one-hour lunch and prayer break.

Seating arrangements at OBO2 were different from OBO1. The company had rented a whole floor of a plaza. There were offices on one side for top management. The employees would sit at tables in an open area. The chairs were placed with their backs toward each other. There was no partition albeit the system units were placed in such a way that they acted as small and partial separators. There were adequate lights in the hall, and three air-conditioners to control the temperature.

Even in this company, the physical movement of the employees was negligible. When they had to go to someone, most of the times, they would move their wheeled office chairs to the other person rather than standing up and walking.

The same symptoms of physical fatigue and tiredness such as stretching legs, arms and necks, standing up and stretching backs, and rubbing eyes were also observed here. This company also did not have any place for the employees to relax or retire. There was no place to even sit other than their working chairs.

4.2. Findings and Analysis of Interview Data

Interview data findings and analysis are put under five main categories: demographics of the participants, and four categories that emerged after qualitative data analysis. Their details are as under.

4.2.1. Demographics of the Participants

The participants belonged to two online business organizations coded OBO1 and OBO2. Five of them were females and six were males. Their age ranged from 25 to 44 with an average age of 31 years and 4 months. As the study required the participants to have at least three years of experience in the current online business organization, the minimum experience of the participants was 3 years while the maximum was 7. Further details are given in Table 1.

Table 1. Demographic Information of the Participants

Code	Gender	Organization	Age	Experience at the Current Workplace
P1	Male	OBO1	26 years	3 years
P2	Female	OBO1	29 years	5 years 2 months
P3	Female	OBO1	33 years	6 years 5 months
P4	Male	OBO1	42 years	6 years
P5	Male	OBO1	44 years	7 years
P6	Female	OBO1	29 years	4 years 2 months
P7	Male	OBO2	26 years	3 years 2 months
P8	Female	OBO2	27 years	3 years 10 months
P9	Female	OBO2	25 years	4 years 5 months
P10	Male	OBO2	29 years	3 years
P11	Male	OBO2	35 years	5 years

4.2.2. Working Styles and Environments in Online Business Organizations

The first research question was developed to explore the working styles and environments in online business organizations. First of all, they were asked if they had any prior work experience at any conventional workplace, and how would they compare the level and type of physical activity between the two.

Seven of the participants (P3, P4, P5, P6, P7, P10, and P11) had prior work experience at a conventional workplace. Two of them (P10 and P11) had done field jobs, P7 had been a school teacher, while the rest had done office work. All of the participants believed that working in an online organization was physically more taxing with very little to no physical movement. P6 said that in online culture, physical movement was much restricted and they had to sit still for the majority of their work. She said:

"Here I have to sit and work. Everything is done by computer. Previously for different things, I had to move, to pick files, for meetings, for discussing things, but now... everything online. I just sit and look at the computer" (P6).

P7 also supported this, explaining how the online working environment and the nature of the job forced him to glue to his seat. He said, *"As you can get any call at any time so you cannot move from your seat"*.

Many participants described how physical tiredness and exhaustion were different in the two types of organizations. P4 explained it in these words:

"Even in a conventional company, I would get tired. But that was different. It was tiredness. I would take rest, and okay. Now it is different. I have to sit all the time, my body becomes stiff. Even if I take rest, it is still the same".

4.2.3. Physical Health Issues caused by Online Working Style and Environment

The most important question was about the physical health issues caused by the online working style and environment. There were two main interview questions relating to it: one inquiring about the level and type of health issues faced by their workmates, and then more specifically to themselves. All of the participants believed that those who had been working in the online working organization for a significant length of time, suffered from some kind of health issue. P3 said, *"Actually, I know a lot of people who have been working here for three years or more; More than 70% have eyeglasses now"*. According to her, most of them did not use eyeglasses when they joined the company. She also mentioned other health issues that many of her co-workers were facing, saying, *"I know many of my colleagues who are affected by this particular working style. They have back issues, they have knee issues, they have stomach problems due to long sittings [hours]"*. Others also confirmed that many of their fellows were suffering from different kinds of health problems which are often associated with the online working style and environment. P10 said that if one had to sit for the whole day (almost 8 consecutive hours) looking at a computer screen, various health issues like back pain and eye strain became unavoidable.

The participants were then asked if they had any health issues due to online working style and environment. Other than P8, all the participants replied positively (Table 2). The most commonly reported issue was related to eyesight. Ten of the participants reported that they had developed eyes related issues since starting to work online. The most commonly reported eye problems were the weakening of eyesight and eye strain. P11 who had been working online for the last five years said that when he joined the organization, his eyesight was *"quite good"*, but within the first year of work, his eyesight started to become weak. After one year, he had to use eyeglasses, and since then the number had been increasing. P3 said that over the last six years, she had got both of her eyes operated on. She further added that the doctor had told her very strictly to stay away from computers, but *"I have no choice"*. Many reported dryness of their eyes which would cause itching and piercing feelings in them. The most commonly reported eyes related issues were weakening of eyesight, dryness, eye strain, itching, and piercing feeling in the eyes. Cataracts and glaucoma were also reported by three different participants. Many also reported seeing black spots in front of their eyes while *"staring at the computer screen"*.

The second most commonly reported health issues were headaches, loss of stamina, and general weakness. Nine participants reported them. They said that since starting to work in the online organization, they would have frequent headaches, and feel

that their stamina and energy were being sapped. P7 said that before starting to work in the online organization, he was physically quite fit and active, but since joining this organization, he would get tired quite quickly. He described the whole situation in these words:

"Earlier, I was a private school teacher. I had to move from class to class, perform other duties, and sometimes would play football or cricket during the game period or break time. I was really active, but now, I just sit on the chair and look at the monitor. I become really tired, really quickly. I could not imagine it could happen in three years" (P7).

Table 2. Health Issues faced by the Participants

Health Issues	Participants who reported it
Eye Issues	P1, P2, P3, P4, P5, P6, P7, P9, P10, P11,
Headache, Loss of Stamina & General Weakness	P2, P3, P4, P5, P6, P7, P9, P10, P11,
Back and Neck Strain/ Issues	P2, P3, P4, P5, P9, P11,
Knee Issues	P2, P3, P6, P7, P10, P11
Obesity	P1, P3, P5, P10, P11,
Stomach Issues	P1, P3, P9, P10, P11
Muscular pain and issues	P3, P5, P11

Neck and back issues and knee issues were the next two most frequently cited health problems. It was reported that long working hours and continuous sitting had led to the neck, back, and knee issues. P3 said that often her neck, back, and knees would become so stiff and painful after long working hours that she could not stand up. She had to move and stretch her body on the chair before being able to even stand. P5 specifically pointed out neck and back issues that he had to face as his computer screen was below his eye level. He said that even his spine had curved a little due to the long working hours and seating style. The same was also echoed by two other participants. P6 specifically talked about knee issues that she started to face after six months or so into her job. After almost one year, it became quite painful and she would limp for a while after off time. After three years of her job, her knees would sometime buckle under her weight. Finally, she had to go through knee surgery. She explained how her knee problem was linked to her job:

"My doctor said it clearly, 'It was because of sitting for a long time. Your knees do not move. They become still and ligaments are damaged.' I have done knee surgery, but my doctor said that it would never be the same again. I will have to pay the price of my working style for the rest of my life" (P6).

Obesity and stomach issues were reported by five participants. They said that even after taking lunch, they had to sit. P3 strongly refuted the idea that it could be by choice or even due to laziness. She said, *"Where to take a walk. In this little hall with hardly enough space to sit? We cannot go out. Administration does not like it. 'You should give all the time to the office.' It is not our choice".* Many others also supported that claim, saying that continuous sitting even after lunch, had created weight and stomach issues for them. P9 who was only around 25 years old, claimed that her digestive system was quite good

before joining that job. Only one year into it, she started to have digestive and stomach issues. She would suffer from acidity, and had a hard time digesting the food.

Three of the participants reported muscular pains and issues that they started to face since working online. They said that due to long sitting hours, their muscles became stiff and stressed. P3 and P11 especially talked about thigh muscles. They said that as they had to sit in the same position for a long time, they would especially feel pain in their thighs. P5 who was the oldest of the three and the one who had spent the longest length of time in an online organization said that sometimes muscular stress and pain would become so acute that he had to take muscle relaxants.

4.2.4. Role and Importance of Healthy Working Style and Environment in Online Organizations

The third key question was about the role and importance of a healthy working style and environment, especially in an online organization. All of the participants agreed to the role and importance of a healthy working environment. P1 said that although a healthy working style and environment were important at all workplaces, it was even more important in online organizations. He said:

"In normal companies, we have many chances to move around, to sit, stand, walk, etc., but in an online organization, we just sit. There is more need to create opportunities for employees to be physically active and move around" (P1).

P6 supported this by saying, *"In other companies, I can move from time to time, but in this, no movement. There should be opportunities and facilities to keep us physically active and fit."* Another participant (P11) talked about the influence of physical health and healthy working style on work efficiency and productivity in these words:

"We have to use computers all the time. After some time, we are really tired, we cannot focus on work. Our pace decreases. If our organization understands the role and importance of our physical health, allows us to give rest to our eyes, uses better devices, etc.; our concentration, focus, and work efficiency would increase, but..." (P11).

They unanimously considered limited physical activity and physically harmful working style as the biggest negative aspect of an online working organization which not only affected their health, but also motivation and productivity. P7 said:

"Sitting all the time, not moving, staring at the screens, it kills passion, it kills energy, it kills motivation, it kills creativity. If there is a realization about physical fitness and a healthful environment, we can work a lot better".

P3 who had also worked out of the country said that the main problem was the lack of understanding about the importance of physical health and activity of the employees in online organizations in Pakistan. He said that in other countries, there was a great deal of realization about the role and importance of physical health and motivation of the employees, and the management would go the extra mile to facilitate the employees. He lamented the fact that in many developing countries, the role and importance of physical health and activities are not only overlooked but are also not considered the responsibility of the organization.

4.2.5. Responses of the Online Organizations to the Physical Health Issues

The participants were finally asked about the responses of the two organizations to improve the situation in this regard. They were first asked if the organizations were told about those specific issues arising from online working style and environment that had been detrimental to their health and physical well-being. Employees in both organizations said that their concerns and issues were reported to the top management quite a few times, but their response was lukewarm at best. They would promise to improve the working conditions and environment, but nothing substantial would happen.

Responding to the question about the attitude of the management towards the employees' health and well-being, P2 bluntly said, *"Not really, I think"*. P5 pointed to a deeper and more worrisome trend. He said that the management did not see it as an issue at all, and he believed that according to the management, the employees were expendable: *"If something happens to us, they will give one month's salary, and that is it. We go home. They will hire someone else. That is it"* (P5).

The same feelings were expressed by the participants from OBO2. While talking about their workplace environment and seating style, P7, who had recently done MBA, elaborated it in these words:

"I think it is deliberate, you know. Just like farmed chicken. They keep them in small cages so that they cannot move around, and waste their energies. We are just like eggs-laying chicken for them. They don't want us to move around and waste energy. They want us to just sit down, work and not even look around".

Many participants from both organizations thought that computers and infrastructure were more important to management than human resources. As a result, their investment was more towards computers and other infrastructure than the employees. P8 expressed that with a painful smile, saying, *"Sometimes, I wish I was a computer"*.

5. Discussion

The study investigated the level and types of physical health hazards associated with online working style and environment in two online business organizations in Pakistan. The observations and the interviews revealed that there was considerably less amount of physical movement, and the conditions were physically more stressful in online organizations. The participants time and time again mentioned the "sit-and-stare" culture in online organizations where a person had to sit on a seat and keep staring at computer screens for hours. It is considered a sign of an efficient person who would just focus on the work. These findings are supported by previous studies. Malik et al. (2020) observed that people working in an online environment had curtailed physical activity. They also found that the management would not appreciate it if the employees moved from their seats. Joyce et al. (2018) also noticed that online working culture deprived employees of many natural breaks. All of these things naturally result in sit-and-stare culture as indicated by the employees.

Physical immobility, constant staring at the computer screens, uncomfortable and stressful sitting postures, and long working hours at online organizations often lead to multiple health issues (van Uffelen et al., 2010; Tucker, 2018). Online working style and long working hours with computers are so much related to physical health issues that certain terms have been coined specifically for them such as computer vision, tech neck, and computer strain (Riew, n.d.; Tucker, 2018). The participants reported eye issues, headaches, loss of stamina, neck and back strain, knee issues, obesity, stomach issues,

and muscular pain as a result of the online working style. Literature repeatedly talks about computer vision- eyes-related issues caused by long computer working hours (Verma, 2001; Tucker, 2018). If such practices are continued for a long period, they may cause irreparable and irreversible damage to the eyes. Long working hours with computers can also cause mental and physical stress, and musculoskeletal disorders (Sanjith & Kumar, 2011). The same was reported by the participants in this study. Some of them indicated that it would be due to non-ergonomic furniture which was bought as it was cost-effective. Mehrparvar et al. (2014) also found that non-ergonomic furniture and improper sitting postures can cause musculoskeletal disorders and back issues. Some of the participants also reported knee issues due to long hours of immobility which is also supported by the literature (Frothingham, 2020).

There was a unanimous consensus among the participants about the role and importance of physical health and a healthy working environment at the workplace. Previous studies also emphasize the importance of physical health (Schaefer et al., 2006; Kamarulzaman et al., 2011), and a comfortable and healthful workplace environment (Hameed & Amjad, 2009; Ramalakshmi, et al., 2020) for better workplace performance and productivity. However, they lamented the fact the management did not seem to care about it. According to the participants, the management would take the employees as expandable and disposable commodities who can be replaced at any time without much of an issue. That forced some of the participants to wish that they were computers. Unfortunately, this does not seem to be an isolated case as Hameed and Amjad (2009) also found that in Pakistan the workplace environment and comfort of the employees are often overlooked. In many cases, the employees had to stay silent due to the fear of losing their jobs and adverse reactions from the top management. This situation is not exclusive to Pakistan but common in many developing countries (Thobaben & Woodward, 1996; Pratap, Bose & Kumar, 2021). International Labour Organization (2019) also emphasized the need for a better work environment. Amongst others, they pointed out the increasing risks of psychosocial issues, work-related stress, and non-communicable diseases.

There seems to be a definite issue with the organizational and leadership approach, with most of the top management focusing more on short-term goals and materialistic things than long-term objectives and human resources. Malik and Azmat (2019) also said that most of the leaders are not, but just administrators in Pakistan. This all despite the fact that numerous studies have proven the role and importance of a conducive, healthy, and healthful working style and environment, and the employees' physical health and well-being to the organizational performance and productivity (Donoghue, 1977; Kamarulzaman et al., 2011; Shaju & Subhashini, 2017; Grimani, Aboagye & Kwak, 2019).

5.1. Recommendations of the Study

Organizations, especially online ones should pay increased attention to the physical health and well-being of the employees as it is not only their ethical and moral responsibility, but also as it would improve the organizational efficiency and output.

Based on the observations, interviews, and literature review; the study recommends some steps to decrease online working style-related physical health hazards. Those steps can be categorized into two main categories: recommendations for the organizations, and recommendations for the employees.

5.1.1. Recommendations for the Online Organizations

Online organizations should realize that for increased efficiency and productivity, they need to focus on the persons behind computers. A healthy, motivated and stress-free person can produce much better work than an unfit, demotivated, and stressed one. Online organizations may take the following steps for a conducive, healthful, and stress-free environment.

- Online organizations must organize workshops to increase awareness about the physical health hazards associated with the online working culture, and suggest steps to mitigate such issues.
- They should provide blue-cut glasses to the employees or put blue-cut screens to reduce the harmful rays from the computer screens.
- There should be retiring rooms for the employees so that they may go there to retire for a while.
- There should be ten to fifteen minutes' short breaks on either side of the lunch break so that the employees can walk a little, move their bodies and give their eyes some rest.
- Ergonomic furniture should be provided which is adjusted to the needs of every employee.
- Fresh clean water should be available so that the employees can splash water into their eyes from time to time.
- There should be annual or biannual medical check-ups for the employees so that any health issues may be detected and cured.

5.1.2. Recommendations for the Employees

Employees in online organizations should be proactive in ensuring a healthy life at the workplace. They should realize that if anything injurious or harmful happens, it would be their life that would be ruined; consequently, they should be more conscious of it. They may take the following steps to maintain a better life.

- After every hour or so, employees should take five minutes' break. They should stand up from their seats, stretch their bodies, and walk for a few minutes. This would reduce the risk of neck, back, and joint issues.
- During that break, they should also splash fresh, clean water into their eyes. It would decrease some of the potential risks like dryness and irritation of the eyes.
- Follow the 20-20 rule. After every 20 minutes of computer work, they should look at something 20 feet away for twenty seconds.
- If the organization does not arrange it, the employees should buy blue-cut glasses. They are not very expensive and one can afford them easily.
- Ensure that the chair is at the same height as the monitor, and is slightly reclined to support the back. Using back-support may also be a good idea.
- Even when seating, one should stretch one's limbs from time to time.

If the recommendations given above (or even some of them) are followed, many of the physical health hazards associated with online work may be reduced. It can also improve organizational efficiency and productivity.

6. Conclusion

The study concludes that physical activity is very limited in online culture as compared to the conventional workplace due to the working conditions and environment.

The online working environment usually has adverse effects on the physical health of employees in multiple ways mainly contributing to the issues like deterioration of eyesight, knee issues, obesity, and stomach problems. Headaches, muscular stress, back and neck pain, and fatigue are also common which may occur because of prolonged sitting and improper postures. Prolonged use of computers also leads to an overall sedentary attitude and lifestyle which lacks adequate physical activity and exercise. The sit-and-stare culture in online organizations often leads to poor health and increased stress.

Even though literature repeatedly highlights the role and importance of a conducive and healthful working style and environment; many organizations especially in developing countries ignore it for monetary reasons and short-term goals. Many of them fail to realize that increased investment in human capital and their well-being will not only increase their organizational attachment but also work efficiency and productivity which would yield more profits for the organizations in the long run.

This study focuses on only two online business organizations in Pakistan. Also, being a qualitative study, the findings cannot be generalized. However, the findings and recommendations of a case study are transferable to other cases with similar conditions. As a result, the findings and recommendations of this study (or some of them) may be applicable to other online organizations with similar cultures, contexts, and issues.

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