

The Psychology Behind a Human-Centered Workplace: How Design Impacts Workplace Performance

Mikaela Simmons

Project Narrative:

After completing my first year in the Interior Architecture and Design program I got the fantastic opportunity to attend a ten-day design trip throughout Grand Rapids, Michigan, and Chicago, Illinois. I traveled with fellow classmates and professors to major furniture manufacturers, Steelcase, Herman Miller, and Haworth, famous architectural buildings, including multiple residences by well-known architect Frank Lloyd Wright, and toured one of the world's leading design centers, The Merchandise Mart. It was on this trip that I experienced open-plan offices for the first time.

An open-plan office is a term used for any floor plan which makes use of large, open space and minimizes the use of small, enclosed rooms such as private offices. I noticed that all the students on the trip wanted a job at these offices. The work-place environment was inviting and it created collaborative opportunities between employees and stripped the corporate hierarchy away. On our tours, the workplace environment and employee's health and wellbeing was always the main topic of discussion from our hosts and tour guides. This also sparked conversations amongst us as students and designers. They mentioned high productivity, happiness-levels, and even cost-savings as advantages to working in an open-office environment. This new knowledge made me realize that companies do care about their employees' mental health and wellbeing. When I came back from my travels and was sharing stories with friends, family, and other students, I realized this is a new concept to almost everybody. Most can't wrap their heads around the idea of not having an assigned

cubicle to go to every day and have a hard time trying to grasp the idea of an open-plan workplace. People question how you can properly work in an environment like that.

After experiencing a studio environment in my interior design classes and seeing the benefits of open-plan work in a professional setting, it made me want to investigate this topic further. Most working adults spend more than half of their awake hours in their workplace and most can't wait until the workday is over.¹ This does not only affect people's work-life but it affects their life outside of work as well. I wondered, what changes in the office environment might reverse negative emotions towards the office space? Does employee mental health affect the companies' success? Aside from how you arrange the furniture, what other design aspects affect employees psychologically? Does a healthy work environment also impact your wellbeing once you get home? What are the successful psychological aspects of an open-plan office environment? Is having unassigned seating enough to create a better work environment? After considering these questions, I have decided that I will focus my research on the psychological impact that designers can implement into a space to make it a healthier and more productive environment for employees.

Once my study is complete, I will design an open-office plan based on the best solutions within these findings and present this information at the Research in the Arts Day in 2022. When I return to Utah State in the fall of 2021 as a senior, I intend to use my research that I have gathered from this fellowship and implement it into one of my senior capstone projects at Utah State. I will also implement the psychological findings from my research into my other student projects, and carry this knowledge into my future career as an interior designer. In addition to the Research in the Arts Day, my work will also be presented to the public at my class's senior exhibit in the spring of 2022. The amazing opportunity to display my project at these events will allow me to educate and discuss with my peers and industry professionals the importance of my research and findings and how it can be used to

¹ Snider, A. (2017). *How Design Impacts The Workplace*. theculturetip.com

enhance the health and wellbeing of people in the workplace. This research will impact my career when I begin working, as I will already have extensive knowledge about putting human health and wellbeing into designs prior to working at a company and learning from professional projects.

To start my research I plan to explore peer-reviewed journals and industry research to develop a literature review and gain a deeper understanding of how and why open office environments are beneficial for some types of work and personality types. I will also look into how open-offices may be detrimental to other people and if any types of work are best done in traditional office environments. I then plan to look into various interior offices, compare both open plan and non-open plan offices, and assess what was successful in the design and what could be improved. After, I will look into physical design implementations, like furniture placement, as well as unconscious psychological decisions, like air purification, lighting, and sound reduction, and how they influence our psyche. Then, I will find the elements that are consistently successful and incorporate them into one evidence-based design project. I will also look into the WELL Building Standard, a certification system focused on how design, operations, and behaviors within the places where we live, work, learn, and play can be optimized to advance human health and well-being. I specifically plan to look into Steelcase, Herman Miller, and Haworth offices and what guided them into making the design decisions of having open-plan offices. The result of this initial research will consist of a literature review of current design practices and an analysis of the benefits of working in an open office along with an identification of potential issues that may negatively affect workers.

Following this initial research, I plan to complete a summer internship in interior design at an architectural firm in Seattle, Portland, Atlanta, St. Louis, Columbus, Dallas, Salt Lake City, or another similar city. Although the internship location isn't finalized yet, through this opportunity I will be able to observe in real-time how people work in an office plan and through first-hand experience how this particular office environment will impact me mentally and physically.

During my internship, I will collect both quantitative and qualitative data. I will get to speak with current designers and be able to interview and seek advice about real-life design through their experiences. I plan to interview my supervisor as well as the other designers and architects I work with to further develop my research. During the interviews, I will use a list of questions consisting of both Likert scale and open answer questions. My personal experiences will also be recorded in weekly journal entries. In the journal entries, I will include written statements as well as any pictures that I have taken from important spaces that influenced those statements. I will collect and analyze my research and incorporate it into a written paper presenting my findings regarding office environments, and combining these findings with my previous research.

The final step will be to conduct interviews and site visits to additional offices. I will reach out to various companies that thrive in their open-plan offices and contact their offices and interview their employees. I would like to successfully contact a minimum of three offices and perform interviews and site visits. The opportunity to go into different work environments and observe how other people interact in the space will be very beneficial in my research. I will see what is working and what is not working and be able to document it through visual and written communication to implement into my final project. In addition, I will conduct interviews with various professionals throughout the office and see how they try to implement human-centered design practices into their work. Human-centered design is an approach to problem-solving, commonly used in design and management frameworks that develops solutions to problems by involving the human perspective in all steps of the problem-solving process. With my findings, I will complete a write-up to compare similarities between the positive and negative aspects of these environments. This will all correlate and be compared with my previous research findings.

Concluding the research for this project, I will design an office that promotes the expected benefits of enhanced performance, communication, employee retention, productivity, and

environmental satisfaction. I will use my real-life experiences, professional experiences, and designers' recommendation to do so. This design work will be communicated through a research poster that will include a detailed floor plan, renderings of the space, written research, as well as a specific legend that correlates to the design drawings that includes detailed information tying back to the research. This way people will be able to visually see why I made these design decisions. This poster will be displayed at the Research in the Arts Day and the senior exhibit of graduating students in the Interior Architecture and Design program in spring 2022.

I am very grateful for the opportunity to apply for the Caine Summer Arts Research Grant and to conduct an in-depth research study on a topic that I am passionate about as an undergraduate student. This fellowship will greatly impact my future career as well as being beneficial for those who are impacted by the projects I complete.

Personal Statement:

I am very excited to apply for the Summer Arts Research Grant. This grant would dramatically benefit my financial standing this summer. It would give me the opportunity to take an internship, that is potentially out of state, and travel and expand my knowledge and experiences throughout various cities. It would also allow me to be able to accept an unpaid internship position if one was offered to me, which I do not currently have the financial ability to do. To have both this research study and an internship on my resume would build my resume, my portfolio, and would give me networking connections that I wouldn't have otherwise. By reaching out to companies and interviewing professionals I am making connections that could be critical when getting a career and growing as a designer.

Throughout my three years in the Interior Architecture and Design program, I have learned that interior design is more than making a space beautiful, it is about positively impacting lives. Interior design is thinking about how a person lives and works in an interior environment and how I as a designer can elevate it to make it a more useful and a positive experience for them. Through my experience in our open-plan studio on campus, I have seen the benefits that come from this space. Examples are that we are all able to easily collaborate with each other. We find that it is a comfortable and productive space to work in. This is why my research topic is so important and valuable to me. In-depth research into the psychology behind certain aspects, like colors and furniture arrangements, of spaces and how they impact people's health and wellbeing will be beneficial for me to have as I grow into a professional designer.

Psychological aspects relating to design are introduced in my studio classes and I would like the opportunity to delve into these topics in more detail. My senior year is mainly self-driven. We get to choose our own projects and create our own timeline with our professors there to help us as we need. This is a reason it is so important for me to consider the impact that my choices have on people's lives and make sure I am thorough with my research for each project. This Summer Arts Research Grant will give me the opportunity to further develop my knowledge of how to psychologically impact people's lives in positive ways.