2025 North American Management Society Conference Proceedings

1. Advancing Diversity Training for Police Officers through Community-Based Multicultural Immersion Learning: Recommendations for Law Enforcement Trainers and Managers 2
2. Charting The Waters: A Research Proposal to Examine the Barriers Removed by Riverfront Districts for Food & Beverage Entrepreneurs in Northwest Indiana 14
3. Frameworks and Best Practices in Online Learning Engagement 20
4. Potential Discriminatory Practices Related to Working Remotely 27
5. Statistical Analysis 35
6. Transforming HR Course Delivery in Higher Ed: Integrating AI and Educational Technology into the classroom Experience 43
7. Water Consumption Intensity Metrics and Sustainability Benchmarking in the Hotel Sector: Stakeholder Perspectives from the DACH Region 44
8. What Business Schools Don't Teach: Death, Dying, and Grief 51
9. *Wu-wei* (無為) and AI 57

Compiled by:

Erin Rae Fluegge, NAMS Proceedings Editor

Southeast Missouri State University

northamericanmanagementsociety@gmail.com

ADVANCING DIVERSITY TRAINING FOR POLICE OFFICERS THROUGH COMMUNITY-BASED MULTICULTURAL IMMERSION LEARNING: RECOMMENDATIONS FOR LAW ENFORCEMENT TRAINERS AND MANAGERS

Chaunda L. Scott

Oakland University

Jeanetta D. Sims

University of Central Oklahoma

Charles Wilson

University of Detroit Mercy

Abstract

Between 2014 to the present a series of police shootings and deaths in communities of color along with the use of deadly force has become a matter of heightened national concern. This paper uses an extensive literature review gathered from open sources, academic journal articles in law enforcement, criminal justice and government documents as well as insights from an adult education community based multicultural immersion program study to highlight the need for cultural competence training activities in law enforcement training curricula in the United States. The authors of this paper argue for consideration of community-based multicultural immersion training approaches by law enforcement trainers and managers. This paper concludes by offering recommendations and directions for future research, practice and dialogue on this topic in the field of law enforcement.

Keywords: diversity training, law enforcement, multicultural immersion learning, police officer training

Rapidly changing demographics in the United States presently suggest that by the year 2043, racial and ethnic minorities will become the majority for the first time in the history of the United States. As a result of this demographic shift, the population of Whites in the United States is estimated to fall from 78% (in 2012) to 69% (in 2060) while the total population of Hispanics, African Americans, Asian Americans, and Native Americans combined will grow from 22% (in 2012) to 31% (in 2060) (Bernstein, 2012). Given the escalating number of unwarranted police shooting deaths and harassment incidents in communities of colors in the United States, advancing the cultural competencies of police officers through community-based multicultural immersion learning in the police force is a much-needed approach.

A cultural competency strategy will serve as a cognitive change process focused on enhancing the mental functions, physical behavior and coping skills of law enforcement personnel who interact with minorities in what they perceive as stressful and threating situations (Spencer, Charbonneau, & Glaser, 2016). The development of skills, abilities and behaviors based on executive functioning will lead to improvement in cognitive skills, self-regulation and mental control of personal behavior during perceived threatening situations. Within the cultural competency learning process, executive functions can be taught, inculcated, and enhanced with training, practice and reinforcement (Salazar, 2019). Improved cultural competency in law enforcement could minimize and/or eradicate unwarranted police shootings and deaths as well as police harassment in communities of color presently and in the future.

Drawing from the extant literature of open sources, academic journal articles in law enforcement, criminal justice, adult education, communication, and government documents as well as a community based multicultural

immersion learning study, we highlight the need for cultural competence education in law enforcement in the United States. After providing a definition of key terms, we argue for consideration of community-based multicultural immersion learning techniques by law enforcement educators and managers and offer recommendations along with directions for future research, practice and dialogue on this topic in law enforcement.

Definition of Key Terms

Given the unique structure of law enforcement within the realm of education and management, we begin this section by clarifying key terms that will be utilized throughout this paper.

- Community-Based Multicultural Immersion Learning – The art and science of learning about multicultural ways of knowing and being first hand from the cultural and ethnic individuals and groups living in multicultural communities
- Community-Based Multicultural Immersion Program – An urban community program that offers its citizens an opportunity to learn multicultural ways of knowing and being first hand from the cultural and ethnic community members living in their multicultural communities.
- Communities of Color – Communities made up primarily of individuals from a variety of cultural and ethnic backgrounds
- Cultural Competence – A set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals to facilitate effective work (such effective decision making) in cross-cultural situations (Cross et al., 1989).
- Cultural Deficit Model (Cultural Deficiency) - Refers to a theoretical argument that the cultural attributes, behaviors and beliefs associated with historically disenfranchised racial/ethnic groups (specifically, minorities) have prevented them from assimilating and attaining social mobility within the U.S. society (Salkind, 2008).
- Cultural Deficiency in Law Enforcement – Refers to the lack of basic understanding by law enforcement personnel of the effects of existing and emerging cultural diversity within a community; also refers to the failure to effectively interact with people of different cultures, especially in perceived threatening situations (Paxson & Strauss, 2018).
- Deadly Force – Legally defined as the force that a reasonable person would consider likely to cause death or serious bodily harm; its use may be justified only under conditions of extreme necessity, when all lesser means have failed or cannot reasonably be employed (Code of Federal Regulations, Title 10, Section 1047.7). The Federal Bureau of Investigation defines deadly force as the "intentional use of a firearm or other instrument resulting in a high probability of death (Lathrop, 2000).
- Minority Males - Refers to part of a group within a country or state that differs in race, religion or national origin from the dominant group. According to Equal Employment Opportunity (EEO) guidelines, minority is used to define particular groups of individuals who share a race, color or national origin and is classified separately as minorities under EEO law (Equal Employment Opportunity Guidelines, n.d.).
- Police Harassment – Negative behavior that impacts people of color in the following ways: illegal detention, racial and ethnic profiling; making racist, sexist, and homophobic remarks; illegal surveillance and spying; and illegal search and seizure of property.
- Police Officers – Also known as a peace officer, policeman, or a policewoman; is a sworn law enforcement employee of a police force (Burton, 2007).

A Synopsis of Policing in Communities of Color in the 21st Century in the United States

Between 2014 to the present, police shootings and their use of deadly force and racial and ethnic harassment in communities of color has caused the issue of police force to become a matter of national concern (Swanson, Territo & Taylor, 2017). The deadly results of police actions in several incidents have heightened media attention, increased scrutiny of police use of force cases by the U.S. Department of Justice, and sparked public outrage. The result of these incidents has been riots, other forms of civil disorder, and protests across multiple cities resulting in criminal charges being levied against officers with some officers being convicted. Focused cultural training in police academies can help ensure that all law enforcement personnel will understand and appreciate the equitable application of law and

what is appropriate and inappropriate behavior towards people based on their race, ethnicity, age, gender, religion or sexual orientation. This approach is achievable and offers a viable solution centered on education and cognitive recognition of potential unconscious bias centered on discriminating assumptions about people based only on visible characteristics and surroundings. The emergence of social activist movements protesting the use of unnecessary force by police officers highlights the public's concern over this issue (Day, 2015). The movement is an attempt to hold the police force accountable for any and all cases of unnecessary force (Luibrand, 2015). All police officers have the authority to use necessary force to uphold the law, but in some cases their use of force is unjustified. The legal and ethical challenges related to the police use of force arises each day in the thousands of police-citizen encounters taking place on the streets of America (Schmalleger, 2018).

Police Training

Police agencies are government organizations that change their philosophical approaches, operational policies, and deployment tactics in response to the external forces generated by social, political, and community factors of the larger environment within which they exist. Many of the catalysts for organizational change arise from major events occurring within the jurisdictional realms of law enforcement. For example, in 2020, the brutal public murder of George Floyd, a Black man in Minneapolis, Minnesota by a White police officer prompted widespread social reactions which launched international Black Lives Matter protests and an urgent call for police reform (Daniels, 2023). Another driving force of change in American policing resulted from the 2014-2015 police shootings of unarmed minority males. The use of deadly force by police resulting in deaths ignited major public protests, demonstrations, and riots, aimed at causing police departments to re-examine and change their methods of policing in minority communities and calling for improved relationships between law enforcement officers and minority citizens (Swanson, Territo, & Taylor, 2017).

Social scientists and psychological researchers conducted studies and have consistently found evidence that police officers are more inclined to use excessive force, including deadly force, with minority suspects than with White suspects (Ridgeway, 2015; Smith, 2004). The Police Executive Research Forum (PERF) conducted an extensive study of police practices that most often result in civil rights violation and lawsuits against police agencies and suggested three (3) strategies for improved policing in the civil rights arena: "(1) adopting strong policy on key issues such as the use of force, (2) ensuring that officers are trained and managed so policies will be followed, and (3) developing strong management and supervision measures…." (PERF, 2013, p. 8). Training is the primary method used to teach and/or indoctrinate police candidates in the basic police subjects required for state certification as a sworn police officer. Today, every state, local, and tribal police jurisdiction mandates that its police recruits successfully complete a Peace Officers Standards and Training (POST) program (Schmalleger, 2018). Nationally police agencies have implemented efforts to address the existing and emerging challenges related to reducing the use of force, improving interactions with minority citizens, and enhancing relationships with its minority communities. The in-service training has focused on de-escalation; and the two most cited areas in academy basic training include: (1) crisis intervention involving people with mental health problems and alternatives to lethal force…; and (2) racial bias training to reduce the effect of bias during field investigations (Swanson, Territo & Taylor, 2018).

A growing body of research literature suggests that effective supervision (Lim & Lee, 2015), relevant organizational policies (White, 2001) and specialized training/education (Police Executive Research Forum, 2015) can significantly reduce the use of deadly force. On the other hand, multiple research studies found that minority males interacting with White police officers are significantly more likely to be searched, arrested, injured or killed in comparison to Caucasian males (Mekawi & Bresin, 2016).

This paper proposes the enhanced and targeted use of cultural training/education for law enforcement personnel at all levels of a police organization. We propose beginning initially in the police academy curriculum, then as an ongoing process during in-service training, and as an essential component of the professional development of supervisors and managers.

To become a police officer, prospective candidates must successfully graduate from a state certified police academy. The police academy curriculum is a series of rigorous educational and physical modules that prepare police cadets for law enforcement duties. Basic police academy training standards were established in the State of California

in 1959. The California Peace Officers Standards and Training Commission (POST) was legislatively created to set minimum standards for the selection and training of police officers. Nationally, 626 police academies provide an average of 588 mandated hours of entry-level law enforcement training. (Swanson, Territo, & Taylor, 2017). However, it should be noted that many police agencies mandate significantly more training hours. For example, the New York State Police curriculum is comprised of 1,079 hours of training at their academy (New York State Police, 2019): California mandates a minimum of 664 hours (California POST, 2019). According to the 2009 Bureau of Justice Report the median number of hours of training of new officers is 881 in state police agencies, 965 in county departments, 883 in municipal agencies, and 719 in Sheriff's departments (Reaves, 2009).

There is also no standardized academy curriculum for police academies across the United States. Every police jurisdiction with an academy has discretion in deciding which curriculum will be used, the number of training hours and the subject areas taught (Schmalleger, 2018). According to the U.S. Department of Justice police recruit training is delivered in either a stress or non-stress model with multiple adaptions of both models. Stress training is based on the military boot camp approach, characterized by application of strong disciplinary methods, the purposeful inducement of mental pressure and rigid demands on performance that can rise to the level of mild abuse (Bickel, 2013). On the other hand, non-stress recruit training, (often online) is based on a much more relaxed learning approach resembling the college environment (Community Oriented Policing Office, 2013). The U.S. Department of Justice, Bureau of Justice Statistics, Report on State and Local Law Enforcement Training Academies (BJS Report, 2009) reported that the majority of police academies train police cadets with the stress-based military orientation.

Police Use of Force

The use of police force is also a major issue and concern in the United States. It is also a fact that police officers put their lives in danger when dealing with individuals who are suspected of criminal activity, engaged in criminal acts, or are non-compliant. In the majority of cases, an officer must make a split-second decision on what level of force is necessary and a misjudgment could result in unwarranted injury or death for both the officer and the citizen (Brakke, 2019). Most civil lawsuits against police result from the misuse of firearms and deadly force (Swanson, Territo, & Taylor, 2018). Because of the broad discretion and power held by law enforcement personnel there is an urgent and special need for police officers to better understand policing in a pluralistic, multicultural and heterogenous society.

The federal government, police leaders, professional associations, academic scholars and social researchers have all recognized and responded to the emerging challenges associated with the interaction between police, race and culture. The initial efforts in cultural awareness training attempted to educate police officers to be more sensitive to minority groups, races, and lifestyles. These efforts continued from the mid 1960's (after the 1967 civil unrest and riots) and into the early 1970's in urban areas inhabited mostly by African American citizens. The training was initially designed to deliver sensitivity training to the police in two distinct models: (1) race-relations training or sensitivity training and (2) cultural awareness training. In the aftermath of the Rodney King beating by white officers of the Los Angeles Police Department, diversity training was again being taught across the law enforcement community, but under a reactive or crisis mode (Hennessy, Hendricks, & Hendrick, 2001). Over the next three decades, the federal government, funded community-oriented policing programs and invested several billion dollars in training programs designed to eliminate racial bias within the law enforcement community (Davidson, 2016). Specifically, the Department of Justice when conducting investigations of police use of force and civil rights violations recognized the persistent presence of selective bias and included the examination for "implicit" or "unconscious" bias, by officers who may not be aware of biases in their actions.

Highlighting the Efficacy of Attaining Cultural Competence from a Community-Based Multicultural Immersion Program

In a dissertation by Scott (2023), entitled Giving Voie to the Experiences of Adults Participating in a Multicultural Immersion Program, a qualitative interpretive case study research design was utilized to explore the factors that promoted learning in a Midwestern adult education focused community-based multicultural immersion program (MIP) from the perspective of 21 diverse adult learners. This unique community-based program was developed more than two decades ago by community members to address the racial tension this urban city often and

still experiences. The goal of the MIP is to develop a network of multicultural leaders and educators who will be prepared to facilitate on-going dialogue and cross-cultural collaborations aimed at closing the racial divide in their communities, workplaces, and society in general (MIP Official Records A).

People who apply and are accepted to participate in this eight-month initiative represent various racial, ethic, and cultural communities throughout the Midwest and a cross-section of nonprofit organizations, businesses, government agencies, educational institutions, civic groups, and health services. The MIP's unique curriculum utilizes cultural guest lecturers, cultural books, role-play, cultural art, cultural films, cultural games, community and professional cultural speakers, cultural music, cultural food, site visits to cultural communities museums, and centers representing these communities, the African American, Asian American, Arab American, Native American and Mexican American communities, along with personal sharing from cultural program instructors, cultural community members and learners in the MIP program to teach the program's content. The MIP's curriculum also includes multicultural ideology, the history of racism and ethnicity in America, democratic values in America, and concepts of multicultural awareness, knowledge, understanding, and sensitivity (MIP Official Records B).

For this case study, 21 individuals were selected randomly to participate from the MIP master participant list with the intention of understanding what these 21 adults had learned from their MIP experience over a 20-year period. The individuals were selected based on their race and ethnicity, type of work setting (i.e., corporate, nonprofit, educational, government, or other), willingness to participate, and availability to take part in the study. To maintain the confidentiality of the participants, a pseudonym was used. See Table 1 below for the demographic profile of the study sample.

Table 1

Demographic Characteristics of the Study Sample (N = 21)

	Number of Participants	Percentage
Gender		
Male	9	43
Female	12	57
Race/Ethnicity		
African American	6	28
Caucasian American	6	28
Arab American	3	14
African	2	5
Asian American	2	5
Filipino	2	5
Age in years	Range: 28-63	N/A
Mean age	45.7	N/A
Educational Level		
Ph.D.	2	10%
M.D.	1	5%
M.A.	10	47%
B.A.	7	33%
High School Graduate	1	5%

Data for this study were gathered through a demographic questionnaire, in-depth interviews, and official records from the MII member checks and follow-up telephone interviews were also used to increase trustworthiness of this inquiry (Merriam, 1998). The analysis of data consisted of five parts: "organizing the data; generating categories, themes, and patterns; testing the emergent hypothesis against the data; searching for alternative explanations of the data; and writing the report" (Marshall & Rossman, 1995 p. 113). The literature review areas on racism in America, the current status of diversity training in organizations, education for social action and learning from experience in adult education helped in the initial phase of analysis to sort the data.

The data analysis process involved tabulating and compiling the questionnaire responses by race/ethnicity, gender, age, educational level, occupation, work setting, and years of work experience and coding the interview transcripts for common themes and patterns, connections. Every effort was made by the researcher to ensure the ideas and perceptions of the participants were represented accurately by remaining aware of the above limitations and biases when the findings were analyzed, interpreted and reported. The case study's findings revealed several factors that promoted multicultural immersion learning in the MIP; see Table 2 below, which provides an overview of the recurring themes from data analysis.

Table 2

Case Study Recurring Themes that Promoted Learning in the Multicultural Immersion Program

Recurring Themes	**Total *N* = 21**	**Percentage**
Rules to guide learning	21	100
Discussions with classmates	21	100
Giving voice to intersecting human realities, race, gender, class, language, other cultural factors, religion, spirituality and learning from cultural activities	21	100
Learning from instructors	21	100
Learning form cultural sites	21	100
Learning, from people of other cultures	21	100

As highlighted in Table 2, the data suggest that utilizing a multicultural immersion approach provided participants an opportunity to learn through exposure to rules that guide learning, cultural activities and through giving voice to intersecting human realities related to race, gender, class, language, religion, spirituality, and other areas associated with identity formation and community concerns. Thus, according to the data, multicultural immersion contributes to learning through providing discussions with classmates, exposure to cultural communities and sites, cultural foods, and people from diverse cultures. Table 3 below offers examples of illustrative quotations from several of the study's participants; these provide evidence of the recurring themes associated with multicultural immersion learning in the MIP. The authors view these themes as useful considerations for advancing a multicultural immersion program in law enforcement training.

Table 3

Illustrative Quotations of Multicultural Immersion Learning in the MIP

The program environment was safe because of ground rules. I am defining safe as being safe from verbal attacks. I mean, no one's feelings are going to get hurt for asking questions they wanted answers to for the purpose of helping all of us understand and learn from difference cultural perspectives. (Sara, Arab American female).
There were great opportunities for dialogue, and I think that was important. There was some real open discussion about perceptions of various groups and community racial problems in our communities. I think this was a great learning opportunity and activity. (Alice, African American female).
I think the sharing aspect was positive. Sitting with different people in a variety cultural communities, mixing with different people over lunch; that was great. We were told at lunch to sit with different people than we sat with in the classroom so that we could expose ourselves to one another. I felt like the other participants were actually very supportive (Joyce, Filipino female).
My classmates and cultural community members helped influence my learning significantly because a lot of their experiences were different from mine. For example, some of my classmates came through immigration and wars. The fact that they were willing to share their personal stories and move forward in their lives even though these things happen to them, I was touched by this and I learned from that. (Ray, African American male).
In hearing, sharing, and listening to others personal stories, I was able to recognize and respect my classmates and community members lived cultural realities as being a connecting point for understanding a way of knowing, being and living other than their own. (Dana, White female).
Learning about culture in this program was fascinating. I learned about Asian history, religious practices and beliefs; Arab cultural celebrations, food, language, and dress; African history, African American spirituality and music along with what these cultural aspects mean to certain cultural groups. All of these things I learned are the essence of who people really are. (John, White male).

Multicultural Immersion Program Insights for Law Enforcement Trainers and Managers

Interesting insights can be offered as a result of the MTP case study for law enforcement trainers and managers as well as for managers who are involved in or who have an interest in multicultural immersion learning. In contrast to other approaches currently being implemented in law enforcement training and management, multicultural immersion learning is unique; this approach encourages law enforcement officers to understand and connect with the diverse community members they serve by:

- Recognizing, respecting, and encouraging individuality through empathetic appreciation for race, class, gender, language, as well as other factors that are seen as intersecting points of being and knowing.
- Eliminating or decreasing stereotyping due to a lack of understanding about diverse cultures, and
- Allowing individual and community consciousness to evolve as the individual begins to see himself or herself connected through convergent and divergent realities and begins exploring ways to change not only themselves but understand their responsibility for participating in change that builds communities that are accepting of these varying realities (Sheared, 1999, p. 43-44).

Recommendations and Implications for Future Research, Practice and Dialogue

Given that multicultural immersion programming offers a unique, insider view of cultural learning in a diverse community, the practice of multicultural immersion programming should be adapted in law enforcement training and management. The following recommendations for facilitating multicultural immersion learning are offered to assist law enforcement trainers and managers in advancing the cultural competence of police officers:

- Enlist individuals from varied racial and ethnic backgrounds to ensure an environment where interactions occur among individuals in a diverse community
- Have ground rules to guide learning which permits participants to tell their stories without critique; this keeps them safe from verbal attacks, which makes the multicultural immersion program a safe environment in which to learn.
- Allow participants to give voice to their past and present personal experiences with cultural diversity and their unique polyrhythmic realities as well as intersections of race, gender, class and language and other cultural factors.
- Provide participants an opportunity to experience aspects of multiculturalism using a hands-on approach (i.e., by learning the histories of various cultures asking questions and talking with diverse people, visiting cultural museums, building lasting friendships, learning cultural dances, and by eating and making cultural foods and crafts).
- Have diverse, knowledgeable, passionate, and professional instructors from diverse backgrounds to increase the quality and the quantity of participants' learning.

Along with the above suggestions for multicultural immersion learning, additional implications exist for advancing the cultural competence of police officers. We offer these for future research and practice. First, incorporate multicultural immersion learning in de-escalation training as a mandatory component. Though some states do not require de-escalation training, when such training occurs elements of multicultural immersion learning should be included (Apex Officer, n.d.). Next, incorporate key mechanisms of inoculation in developing resistance-based message strategies within multicultural immersion training (i.e., Compton & Pfau, 2005; Ivanov, Sims, Compton, Miller et al., 2015). As a protective attribute in law enforcement training design, inoculation has benefits that linger when the strategy is used as a formative approach and when participants engage in post-inoculation talk. Finally, the foundation of research on multicultural education is presently focused on teacher education and a students' need for multicultural education in K-12 settings (Banks, 1981, Banks & Banks, 1993). Further research is needed on the practice of multicultural immersion programming in other types of adult education contexts (i.e., academic, corporate, public relations, law enforcement, criminal justice, health care and religious settings) in order to understand how to best design and facilitate this practice.

Conclusion

Improved diversity training in law enforcement is a critical need in present day police officer preparation and police-community relations. Using the extant literature and a case study steeped in multicultural immersion, this research has positioned multicultural immersion learning as an important practice for assisting law enforcement trainers and managers in developing and overseeing multicultural immersion approaches in the cultural competence training for police officers. Our hope is for multicultural immersion approaches to be implemented in the current and future training for police officers in an effort to better equip them to protect and serve individuals in the communities they are assigned to.

References

Apex Police Officer (n.d.) Police training requirements. Retrieved on November 30, 2019 from https://www.apexofficer.com/police-training-requirements.

Banks, J. A. (1981). *Multiethnic education: Theory and practice*. Boston, MA: Allyn & Bacon.

Banks, J. A. (2014). *An introduction to multicultural education*. Boston: Pearson/Allyn and Bacon.

Banks, J.A., & Banks, C.A.M (Eds). (1993). *Multicultural education and perspectives*. (2nd ed.) Boston: Allyn & Bacon

Bernstein R. (2012). U.S. Census Bureau Projections Show a Slower Growing, Older, More Diverse Nation a Half Century from Now. United States Census Bureau, Public Information Office. CB12-243. Released Wednesday, Dec 12, 2012. Available at: https://www.census.gov/newsroom/releases/archives/population/cb12-243.html

Bickel, K.W. 2013. Recruit training: Are we preparing officers for a community-oriented department? Community Oriented Policing Office. Retrieved on September 16, 2019 from https://cops.usdoj.gov/html/dispatch/06-2013/preparing_officers_for_a_community_oriented_department.asp#four.

Brakke, P. 2019. Crime in America: Conservatives' approach towards criminal, police, criminal justice, and the opioid crisis. American Leadership Book Publishing.

Burton's Legal Thesaurus, 4E. (2007). Retrieved November 17, 2019 from https://legaldictionary.thefreedictionary.com/peace+officer.

California Commission on Peace Officers Standards and Training. 2019. Retrieved on September 16, 2019 from https://post.ca.gov/regular-basic-course.

Cell, E. (1984). *Learning to learn from experience*. Albany: State University of New York.

Code of Federal Regulations, Title 10, Section 1047.7. Use of deadly force. Retrieved from https://www.law.cornell.edu/cfr/text/10/1047.7

Compton, J. A., & Pfau, M. (2005). Inoculation theory of resistance to influence at maturity: Recent progress in theory development and application and suggestions for future research. In *Communication Yearbook 29* (pp. 97–145). New York: Lawrence Erlbaum.

Cox, T., Jr. (1993). *Cultural diversity in organizations: Theory, research and practice*. San Francisco: CA. Berrett-Koehler Publishers.

Cross, T., Bazron, B., Dennis, K., & Isaacs, M. (1989). *Towards a culturally competent system of care* (Vol. 1). Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center. Retrieved on November 15, 2016 from https://eric.ed.gov/?id=ED330171.

Daniels, C. M. (2023). Here's what's changed since George Floyd's murder three years ago. The Hill, Race and Politics. Retrieved June 19, 2023 from https://thehill.com/homenews/race-politics/4020985-heres-whats-changed-since-george-floyds-murder-three-years-ago/

Dawson, G. G. (2013). Using conversational learning to enhance teaching diversity. *E-Journal of Business Education & Scholarship of Teaching*, 7(2), 31-38.

Day, E. 2015. "#BlackLivesMatter: the birth of a new civil rights movement". The Guardian. Retrieved September 18, 2019 from https://cops.usdoj.gov/html/dispatch/062013/preparing_officers_for_a_community_oriented_department.asp#one.

Davidson, J. (2016). Implicit bias training seeks to counter hidden prejudice in law enforcement. The Washington Post. August 16, 2016. Retrieved on November 19, 2019 from https://www.washingtonpost.com/news/powerpost/wp/2016/08/16/implicit-bias training-seeks-to-counter-hidden-prejudice-in-law-enforcement

Denzin, N. K., & Lincoln, Y. S. (2018). *The sage handbook of qualitative research*. (5th ed.) Thousand Oaks: CA. Sage Publications, Inc.

Equal Employment Opportunity (EEO) program guidelines and terminology. n.d. Retrieved from https://www.archives.gov/eeo/terminology.html.

Gilbert, J. A. (2005). Sexual harassment and demographic diversity: Implications for organizational punishment. *Public Personnel Management*, 34(2), 161-174.

Grant, C. A. (Ed). (1992) Research and multicultural education: From the margins to the mainstream. Washington, DC: Falmer Press.

Herbst, P. H., (1997) *The color of words: An encyclopedia dictionary of ethnic bias in the United States*. Intercultural Press, Inc.

Hennessy, S.M., Hendricks, J. & Hendricks, C. (2001). Cultural awareness and communication training: What works and what doesn't. *Police Chief*, Volume: 68, Issue:11, November 2001 pages:15-19.

Heymann, J., & Sprague, A. (2017). Raising our voices against discrimination and for public *Health. American Journal of Public Health*. pp. 1256-1258.

Howard-Hamilton, M. (2000). Programming for multicultural competencies. *New Directions for Student Services, (90), p 12, pp. 67-78.*

Ivanov, B., Sims, J. D., Compton, J., Miller, C., Parker, K. A., Parker, J., et al. (2015). The General Content of Post-Inoculation Talk: Recalled Issue-Specific Conversations Following Inoculation Treatments. *Western Journal of Communication, 79*(2), 218-238.

Kanter, R. M. (1993). The tale of O: On being different (Video recording). Cambridge MA.

Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.

Lathrop, S.W. (2000). Reviewing use of force: A systematic approach. *FBI Law Enforcement Bulletin* (October 2000). Retrieved November 17, 2019 from https://leb.fbi.gov/filerepository/archives/oct00leb.pdf.

Lim, H & Lee, H. (2015). The effects of supervisor education and training on police use of force. *Routledge, Criminal Justice Studies*, 2015 Vol. 28, No. 4, 444–463. Retrieved November

14, 2019, from https://www.researchgate.net/publication/285198778

Luibrand, S. 2015. "Black Lives Matter: How the events in Ferguson sparked a movement in America". CBS News. Retrieved September 18, 2019.

Marshall, C., & Rossman, G. B., (1995*) Designing qualitative research* (2nd ed). Thousand Oaks, CA: Sage Need updated references

Merriam, S. B. (1998). *Qualitative research and case study application in education*. San Francisco, CA: Jossey-Bass.

Mekawi, Y. & Bresin. K. (2015). Is the evidence from racial bias shooting task studies a smoking gun?: Results from a meta-analysis. Journal of Experimental Social Psychology · September 2015 DOI:

10.1016/j.jesp.2015.08.002. Retrieved on November 01, 2019 from https://www.researchgate.net/publication/281651628.

Multicultural Immersion Initiative Official Record 1996- 2006.

National community education association website (2002). http//: www.ncea.com

New York State Police Academy.gov. 2019. Retrieved on September 16, 2019 from https://troopers.ny.gov/Academy/Basic_School/Curriculum/.

Paxson, M. & Strauss, R, (2018) Cultural diversity and cultural competency for law enforcement. Police Chief. Retrieved from https://www.policechiefmagazine.org/cultural-diversity-and-competency/.

Petryk, Thompson, M. C., & Boynton, T. (2013) Building multicultural residential communities: A model for training student staff. *New Directions for Student Service,* (144), 68-78.

Piper, A. (2015). A focus on people. *Internal Auditor*, 72(3), 47-51.

Police Executive Research Forum. (2013). Civil rights investigations of local police: Lessons learned. Retrieved on November 17, 2019 from https://www.policeforum.org/assets/docs/Critical_Issues_Series/civilrightsinvestigationsoflocalpolicelessonslearned2013.pdf.

Police Executive Research Forum. (2015). Critical issues in policing series: Reengineering training on police use of force. Retrieved on November 18, 2019 from www.policeforum.org/ assets/reengineeringtraining1.pdf.

Reaves, B. A. (2009). *State and Local Law Enforcement Academies.* Washington, D.C.: Bureau of Justice Statistics Special Report, U.S. Department of Justice.

Ridgeway, G. (2016) Officer risk factors associated with police shootings: A matched case–control study. *Statistics and Public Policy*, 3:1, 1-6. Retrieved on November 01, 2019 from https://amstat.tandfonline.com/doi/full/10.1080/2330443X.

Salkind, N.J. (2008). Encyclopedia of Educational Psychology. SAGE Publications, Inc. Thousand Oaks, CA. Retrieved from https://sk.sagepub.com/reference/educationalpsychology/n60.xml

Scott, C.L. (2003). Giving voice the learning experiences of adult learners participating in a Multicultural immersion program (Doctoral dissertation). Teachers College, Columbia University. New York: NY, Retrieved from ProQuest Dissertations and Theses Database: (No. 3106959).

Scott, C.L. (2014) Historical perspectives for studying diversity in the workforce. In M. Byrd & C. Scott (Eds.), *Diversity in the workforce: Current and emerging trends* (pp. 3-33). New York, NY: Routledge Taylor & Francis Group.

Schmalleger, F. 2018. Criminal justice: a brief introduction. Pearson Education Inc, Boston, MA.Sheared, V. (1999). Giving voice: Inclusion of African American students' polyrhythmic realities in adult basic education. In T. Guy (Ed.), Providing culturally relevant adult education: A challenge for the twenty-first century. *New Directions for Adult Education,* No. 82. pp. 33-48. San Francisco: Jossey-Bass.

Spencer, K. B., Charbonneau, A. K., & Glaser, J. (2016). Implicit bias and policing. Social and Personality Psychology Compass, 10(1), 50-63. Retrieved on November 19, 2019 from https://gspp.berkeley.edu/assets/uploads/research/pdf/SpencerCharbonneauGlaser.Compass.2016.pdf.

Swanson, C R., Territo, L. and Taylor, R.W. (2017). Police Administration, 9th Edition. Pearson Education Inc, Boston, MA.

Thomas, R. R., Jr. (1992). Managing diversity: A conceptual framework. In S. E. Jackson & Associates (Eds.), Diversity in the workplace (pp. 306-317). New York: Guilford Press.

Tseis, A. (2017). Campus speech and harassment. *Minnesota Law Review, 101(5), 1863-1917* West, C. (1993). *Race matters*. New York: Vintage Books.

CHARTING THE WATERS: A RESEARCH PROPOSAL TO EXAMINE THE BARRIERS REMOVED BY RIVERFRONT DISTRICTS FOR FOOD & BEVERAGE ENTREPRENEURS IN NORTHWEST INDIANA

Ben T. Land

Purdue University Northwest

Introduction

Municipal Riverfront Development Districts in Indiana are a policy tool established under state law (*Indiana Code § 7.1-3-20-16.1*) that allow the Alcohol and Tobacco Commission (ATC) to issue one-way, two-way, or three-way liquor permits to restaurants located within defined riverfront zones, bypassing the typical quota system.

These permits must fall within a Municipal Riverfront Development District designated by a city or town, as allowed under Indiana Code § 7.1-3-20-16.1, which authorizes additional alcoholic beverage licenses in areas identified for redevelopment or economic revitalization that are adjacent to a river or a lake greater than 750 acres (*Indiana Code § 7.1-3-20-16.1(b)(i)*).

Local governments across the State of Indiana use these districts to attract restaurants and support commercial investment in areas where the state liquor license quota system otherwise limits growth. For example, the City of Hobart in Lake County issues three-way liquor licenses within its designated Riverfront District at a significantly reduced cost. The program requires a $550 local application fee paid to the City of Hobart and a $1,000 annual fee paid to the State of Indiana, and it is intended to support downtown revitalization and reduce barriers for food & beverage entrepreneurs (*City of Hobart, 2023*). Similarly, the Town of Schererville established its Riverfront Development District in 2023 to expand the number of available liquor permits after identifying the quota system as a major barrier to restaurant recruitment (*Gallenberger, Lakeshore Public Media, 2023*).

These cases illustrate how small-to-medium Indiana communities employ Municipal Riverfront Development Districts to lower potential financial barriers, broaden access to alcohol permits, and encourage new commercial activity in targeted corridors. By offering lower fees and a more accessible permitting path, these development programs help municipalities bring their residents more entertainment options by supporting the growth of local food & beverage businesses.

The impact of these local programs becomes even clearer when compared with the far higher costs associated with purchasing a traditional liquor license on the open market. According to the Indiana Alcohol and Tobacco Commission, in its *Transfer Sale Price by Jurisdiction* report, published on July 1, 2025, open market transfers of *Beer Wine & Liquor - Restaurant* permits across the State of Indiana have reached the six-to-seven figure range, with one recorded sale price reaching approximately $1.15m in Indianapolis (*Indiana Alcohol and Tobacco Commission, 2025*). These high costs create a significant barrier for small business owners, making it difficult for new restaurants to open or for existing businesses to expand.

Fort Wayne's recent establishment of the North River District provides a clear example of the potential benefits of Municipal Riverfront Development Districts. The city has designed the 29-acre district to encourage new restaurants & athletic venues, attract commercial investment, and revitalize blighted riverfront property while simultaneously creating more vibrant public spaces for residents of the City of Fort Wayne and beyond. Early reports indicate that participating businesses benefit from reduced permitting costs & exposure to the growing pedestrian market, while the city gains an estimated $35.9m in additional annual economic activity, with $8.45m expected to be spent on the Food & Beverage Industry (*City of Fort Wayne, 2025*). This dual advantage highlights how riverfront districts can serve both entrepreneurial and municipal interests.

Research Gap

Fort Wayne's experience shows that Municipal Riverfront Development Districts can stimulate local business growth and revitalize riverfront areas in a larger metropolitan market. However, smaller and mid-sized communities, like those in Lake County and Northwest Indiana overall, face very different economic and demographic conditions. While these programs are presumed to benefit food & beverage entrepreneurs, the specific ways in which they reduce barriers deeper than financial, encourage new business openings, support business growth, and sustain existing operations are not well documented. In particular, it is unclear how the cost savings from riverfront licenses are reinvested by entrepreneurs, whether into their businesses, the surrounding riverfront area, or the local economy more broadly. There is limited data capturing these real world impacts in smaller markets, making it difficult for business owners, local governments, and tourism agencies to understand how to replicate the successes seen in larger cities. Further research in this area is essential to provide actionable data that helps entrepreneurs maximize the benefits of these programs while supporting local economic development and community sustainability in Northwest Indiana.

Literature Review

Municipal Riverfront Development Districts in Indiana operate within the broader context of place-based economic development strategies designed to stimulate business activity and revitalize blighted areas. Local government documentation and ordinances, such as Crown Point Ordinance No. 2025-10-27, establish formal frameworks for these districts, emphasizing the role of municipal zoning and licensing flexibility in supporting targeted commercial growth (*City of Crown Point, 2025*). These legal structures create opportunities for municipalities to strategically attract food & beverage based businesses by providing permits that bypass state-imposed quotas, reduce application fees, and streamline the licensing process (*Gallenberger, Lakeshore Public Media, 2023*).

Municipal and regional planning reports show that riverfront redevelopment initiatives in larger urban areas often pursue multiple goals at once, such as boosting local revenue, attracting tourism, and improving public amenities. Fort Wayne's Riverfront provides a clear example, demonstrating how food & beverage development can be integrated with broader urban revitalization efforts (*Victus Advisors, 2025; City of Fort Wayne, 2025*). Early results indicate that the district not only generated measurable economic activity but also allowed businesses to obtain permits more quickly, highlighting how well-designed policy interventions can create identifiable benefits for both entrepreneurs and the surrounding community. Evidence from smaller Indiana municipalities underscores that the impacts of riverfront districts are context dependent. In Hobart and Schererville, program documents and local reporting suggest that reduced licensing fees and streamlined approval processes help food & beverage entrepreneurs overcome initial financial and bureaucratic barriers (*City of Hobart, 2023; Gallenberger, Lakeshore Public Media, 2023*). While these programs are less studied than their larger city counterparts, they provide preliminary indications that cost savings may allow business owners to reinvest in interior and/or exterior facade improvements, staffing, marketing, or community-facing amenities.

Comparative research from more urban regions highlights that the scale and density of the local market influence the effectiveness of these policy interventions. For example, Chicago's Riverwalk Concession Program demonstrates that regulatory support of a strategic location can stimulate clustering of food & beverage establishments, increase pedestrian traffic, and generate tourism revenue (*City of Chicago, 2022*). However, smaller markets in Northwest Indiana do not inherently benefit from the same foot traffic or metropolitan density, which raises questions about how similar programs translate into tangible business growth and community impact in less dense, mid-sized contexts. Preliminary reports suggest that riverfront districts can create additional opportunities beyond direct financial savings. Even modest improvements to public spaces, aesthetic upgrades, and enhanced access can increase foot traffic, encourage complementary commercial activity, and foster community engagement (*City of Fort Wayne, 2025; Victus Advisors, 2025*). For food & beverage entrepreneurs, these enhancements create concrete benefits, including increased visibility, higher patronage from both residents and visitors, and a more active streetscape that supports business growth, event programming, and collaboration with neighboring establishments. In this way, riverfront districts extend beyond financial and regulatory relief, fostering an environment where restaurants, cafes, and bars can flourish as central components of a revitalized riverfront community.

Research Questions

This study seeks to understand how Municipal Riverfront Development Districts in Northwest Indiana can reduce economic and regulatory barriers for food & beverage entrepreneurs and shape business outcomes. Specifically, it will address the following questions:

- **How do riverfront districts reduce financial and regulatory barriers for food & beverage entrepreneurs?**
- **In what ways are cost-savings from these programs reinvested into the business and/or surrounding community?**
- **How do riverfront districts influence business growth, sustainability, and community engagement in small-to-mid-sized markets?**

By addressing these questions, the study will generate actionable insights that guide policy decisions, inform local economic development strategies, and help food & beverage business owners make informed choices about leveraging riverfront district programs to support growth, sustainability, and community engagement along the State of Indiana's riverfronts.

Methodology

Study Design

This research will use a mixed-methods approach to comprehensively examine the impact of Municipal Riverfront Development Districts on food & beverage entrepreneurs in Northwest Indiana. The study will combine quantitative analysis of licensing and business data with qualitative interviews of local business owners. This dual approach allows for both statistical assessment of trends and in-depth exploration of entrepreneurs' experiences, providing a holistic understanding of how riverfront districts reduce economic and regulatory barriers and influence business growth, sustainability, and community engagement.

Quantitative Data Collection & Analysis

The quantitative part of this study will look at licensing and business activity data in Municipal Riverfront Development Districts of small-to-medium-sized cities in the State of Indiana to answer the first and third research questions: *how these districts reduce financial and regulatory barriers*, and *how they affect business growth and sustainability*. Data will come from Indiana Alcohol and Tobacco Commission licensing records, municipal permit databases, and public business directories. Key information will include the number of new food & beverage businesses, type and cost of licenses, business openings and closures, and employment levels.

The study will summarize trends over time and compare businesses inside the Riverfront Districts with similar food & beverage based businesses outside. Basic statistical analysis and simple regression will help show the relationship between access to riverfront district programs and business outcomes, including growth, survival, and speed of license approval. This part of the study will provide clear numbers to show how the districts affect small-to-mid-sized market, food & beverage-based businesses.

Qualitative Data Collection & Analysis

To understand how food & beverage entrepreneurs use the benefits of Municipal Riverfront Development Districts, this study will conduct interviews with business owners operating within riverfront districts in the State of Indiana. Participants will be chosen to represent a variety of business types, sizes, and years in operation.

The interviews will explore how business owners perceive the financial and regulatory benefits of riverfront district programs, and how they use any cost savings from reduced licensing fees or faster approvals. Questions will also examine decisions related to staffing, marketing, renovations, and community engagement, as well as any challenges they face in sustaining or growing their businesses.

Interviews will be recorded and transcribed, and the information will be reviewed to identify common themes and patterns. This approach will help explain not only whether the programs help businesses, but also how owners apply the savings and opportunities to support growth, improve operations, and benefit the surrounding community.

Participant Selection & Recruitment

To ensure a meaningful range of perspectives, this study will aim to interview approximately 8–12 food & beverage business owners located within established Municipal Riverfront Development Districts in Indiana. Communities who have established Municipal Riverfront Development Districts include but are not limited to: Hobart, Schererville, St. John, Kokomo, Goshen, Marion, and Noblesville.

Participants will be identified through municipal business lists, local chambers of commerce, and public business directories. The goal is to include a mix of newer and more established businesses, as well as different types of food & beverage operations such as restaurants, cafes, and bars.

Potential participants will be contacted by email with a short description of the study, followed by a request to schedule a voluntary interview. This recruitment process is designed to reach a diverse group of entrepreneurs while respecting their time and availability. All participation will be voluntary, and owners may decline or withdraw at any point.

Data Collection Time Frame & Overall Scope

The quantitative portion of this study will rely on existing licensing and business activity data from recent years, depending on what records are available through municipalities and the Indiana Alcohol and Tobacco Commission. Using previously collected data allows the study to compare business patterns before and after riverfront district designation without requiring a long-term data collection period.

The qualitative component will take place over a two-year period. This timeline provides enough flexibility to schedule interviews with a wide range of food & beverage entrepreneurs, including both recently established businesses and those that have operated in riverfront districts for several years. Spreading the interviews across two years also makes it possible to capture insights during different seasons and business cycles, which may influence decisions about reinvestment, staffing, customer traffic, and community engagement.

Expected Outcomes

This study is expected to provide a clearer picture of how Municipal Riverfront Development Districts benefit food & beverage entrepreneurs in small-to-mid-sized markets in the State of Indiana. By combining quantitative data and firsthand accounts from business owners, the research will likely show specific ways in which these districts reduce financial and regulatory barriers. For example, the study may confirm that lower licensing costs and faster permit approvals allow entrepreneurs to reinvest savings into staffing, marketing, renovations, or community-facing initiatives.

The research may also reveal patterns in business growth and sustainability, including whether participation in riverfront districts supports longer-term operations, encourages new openings, and strengthens community engagement through events, partnerships, or public space improvements. Insights from the interviews are expected to show how different types of businesses, such as restaurants, cafes, and bars, leverage district programs in unique ways.

Ultimately, the study aims to produce actionable information for policymakers, local economic development agencies, and business owners. Findings could guide decisions about the design or expansion of riverfront district programs, helping municipalities create conditions that better support entrepreneurial growth while contributing to vibrant, economically active riverfront communities. The study intends to provide practical guidance for food & beverage based entrepreneurs and actionable insights for policymakers to shape effective riverfront district policies and amenities.

Estimated Budget

The proposed research will require funding primarily for data collection, participant engagement, and materials. The estimated budget is outlined below:

1. **Participant Incentives:**
   To compensate business owners for their time and encourage participation in interviews, each participant will receive a $50 gift card. With an expected 8 to 12 participants across the cities of Hobart, Schererville, St. John, Kokomo, Goshen, Marion, and Noblesville, total cost is approximately $600.
2. **Travel Expenses:**
   Travel to participating businesses in the above cities will be necessary for in-person interviews. Estimated mileage reimbursement, parking, and incidental travel costs total approximately $1,000 to account for multiple trips across the spread-out locations.
3. **Data Access & Materials:**
   Acquiring licensing and business data from municipal records may involve nominal fees. Printing, transcription services, and office supplies are estimated at $300.
4. **Recording & Transcription Tools:**
   Digital voice recording & transcription software subscription for interviews: $100.

Total Estimated Budget: $2,000

This budget supports a two-year data collection period and ensures that interviews are conducted efficiently and respectfully, while providing clear documentation and analysis of how Municipal Riverfront Development Districts impact food & beverage entrepreneurs in small-to-mid-sized markets across the State of Indiana.

Conclusion

This research will provide a detailed understanding of how Municipal Riverfront Development Districts reduce financial and regulatory barriers for food & beverage entrepreneurs in small-to-mid-sized Indiana markets. By combining licensing data with interviews from business owners across multiple riverfront districts, the study will reveal not only how these programs support new openings and long-term business sustainability but also how entrepreneurs reinvest cost savings into their operations and the surrounding community. The findings will offer practical guidance for business owners considering participation in district programs and actionable insights for policymakers and local economic development agencies seeking to strengthen entrepreneurial growth, improve community engagement, and enhance the economic vitality of riverfront areas. Ultimately, this study aims to show that well-designed riverfront districts can be a useful tool for both business longevity and responsible community development in Northwest Indiana.

References

City of Chicago. (2022). *Chicago Riverwalk Concession Program Handbook.* www.chicago.gov/content/dam/city/sites/chicago-riverwalk/pdfs/2022/Riverwalk%20Concession%20Handbook_2022.pdf

City of Crown Point (2025). *Ordinance No. 2025-10-27: Establishing Municipal Riverfront District Project Area within the City of Crown Point.*

City of Fort Wayne, Victus Advisors. (2024). *Fort Wayne Sports & Events Center Study: Final Report*.

https://hdp-us-prod-app-fw-engage-files.s3.us-west-2.amazonaws.com/5017/3949/1008/VictusAdvisors_FortWayneSportsEventsCenter_FinalReport.pdf

City of Fort Wayne. (2025). *North River District Project Information*. https://engage.cityoffortwayne.org/northriver

City of Hobart. (2023). *Business Incentives - Riverfront Liquor License City of Hobart, Indiana*. https://www.cityofhobart.org/317/Riverfront-Liquor-License

Indiana Alcohol and Tobacco Commission. (July, 2025). *Transfer Sale Price By Jurisdiction* https://www.in.gov/atc/files/Transfer-sale-price-by-jurisdiction.pdf

Indiana Code. (2024). *Title 7.1, Article 3, Chapter 20, Section 16.1 – Municipal Riverfront Development Project; Alcoholic Beverage Permit Requirements*. Justia. https://law.justia.com/codes/indiana/title-7-1/article-3/chapter-20/section-7-1-3-20-16-1/

Gallenberger, Michael. Lakeshore Public Media. (2023, January 20). *Schererville creates riverfront district to bring more liquor licenses downtown*. https://www.lakeshorepublicmedia.org/2023-01-20/schererville-creates-riverfront-district-to-bring-more-liquor-licenses-downtown

FRAMEWORKS AND BEST PRACTICES IN ONLINE LEARNING ENGAGEMENT

Megan M. Kalina

St. Catherine University

Mary Henderson

St. Catherine University

Introduction

Online education has increased in attractiveness to students, with higher demand for them resulting in additional course offerings at universities. As faculty gain more experience, best practices are emerging. This paper examines two theoretical frameworks and practical best practices offered by four universities to increase student engagement in online learning.

Online Learning Theoretical Frameworks

The Nudge Theory and Community of Inquiry Model are two frameworks that are helpful in understanding best practices regarding online learning and student engagement. They are both backed by research, and when their fundamental concepts are employed in the online classroom, they can help create a high-quality and engaged learning environment.

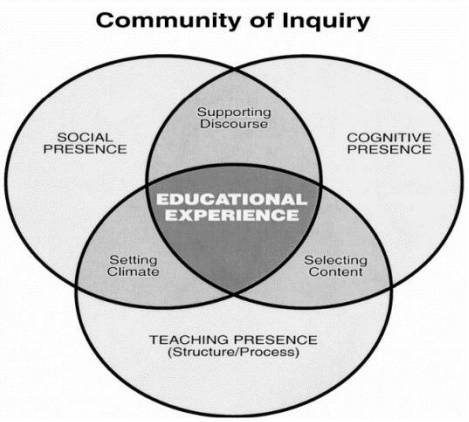
Nudge Theory

The nudge theory is helpful in determining how to maximize the online learning experience and reach optimum engagement. This theory informs course design for our synchronous class sessions and the asynchronous course modules. Thaler and Sunstein (2021) describe it this way, "…apparently insignificant details can have major impacts on people's behavior. A good rule of thumb is to assume that everything matters… the power of these small details comes from focusing people's attention in a particular direction" (p. 4). We also refer to another concept related to the nudge theory that utilizes "…some basic principles of good choice architecture. Choosers are humans, so designers should make life as easy as possible. Send reminders (but not too many!)…" (Thaler & Sunstein, 2021, p. 18). Many organizations knowingly or unknowingly utilize nudges to get their clients to take action. Text messages about upcoming appointments from doctors, dentists, and businesses that provide you services offer reminders or nudges to get some work done (Thaler & Sunstein, 2021, p. 93). This theory is applied in the classroom through the weekly module and the checklist. Often, students state they print the checklist and cross off assignments as they complete their work; this action leads to a sense of accomplishment. Best practices, such as the latter ones, are reviewed later in the paper.

Community of Inquiry

With the significant shift to online learning in higher education, it is important that the educational experience for students continues to promote a strong learning environment.

Garrison et al. (2000) designed a research-based framework for online learning called the Community of Inquiry (CoI). "A worthwhile educational experience is embedded within a Community of Inquiry that is composed of teachers and students – the key participants in the educational process" (Garrison et al., 2000, p.88). This framework assumes learning occurs through the interaction of three core elements: cognitive presence, social presence, and teaching presence (Garrison et al., 2000). The table below shows the interrelationship between these core elements.



(Garrison, et al., 2000)

Building a learning community that supports a high-quality online education experience must be a safe space where students feel like they belong. The following interactions must be considered, and attention paid to how learners interact (Lamm, 2023):

1. Student to Teacher
2. Student to Student
3. Student to Content

The first element in this framework is cognitive presence, which is the most basic to success in higher education (Garrison et al., 2000). It is the extent to which learners construct meaning through discourse and reflection. It is vital in critical thinking, a goal of higher education (Garrison et al., 2000). Cognitive presence is at the core of CoI (West et al., 2024).

The second element is social presence, which refers to communication between the instructor and all the learners in the course. It should move from introduction to community to camaraderie. It is also the first element required before cognitive and teaching presence can occur (University of Oregon, n.d.). These relationships form within the community and learners' sense of belonging. This responsibility should be shared among the teacher and all students (Garrison et al., 2000).

The third element is teaching presence, which consists of the design of the educational experience. It is what the instructor does to create a purposeful and productive CoI (West et al., 2024). According to Garrison et al. (2000), the teaching presence supports and enhances the social and cognitive presence in realizing education outcomes.

The CoI framework can help guide online educators in creating high-quality learning experiences that provide a supportive environment where students feel a part of the community.

Best Practices

Best practices inform our work and efforts for continuous improvement in delivering interactive online courses. We reviewed the guidelines and frameworks of Harvard University, Stanford University, and North Carolina State University. We discuss our own best practices for teaching online classes in a business program at a private midwestern university.

Harvard University

Harvard University (Harvard) has a landing page on its website called Teaching Remotely, which provides many resources for online instructors in synchronous and asynchronous delivery formats. In this section, we discuss some of the significant best practices noted by Harvard in their Teaching Remotely website area.

The following teaching tips have been identified as ways for instructors to create an engaging learning environment in both the online and blended approaches (Teaching Remotely, n.d.). It is first noted that the basis of teaching does not change based on the delivery method, but the forms of the teaching interaction may. “Well-planned, intentional uses of online technologies can encourage and facilitate even more ‘lean forward’ behaviors and more interaction with and among students” (Teaching Remotely, n.d.). It was noted that learner engagement may be increased by the following:

- Identifying learners' questions about the material
- Using polls and other interactive technologies to get a sense of students' experience, comprehension, and reactions ("reading the room")
- Inviting specific students' answers (cold calling)
- Opening the floor to a general discussion of particular questions
- Having students engage in small "buzz group" conversations via breakout rooms
- Creating opportunities for synchronous or asynchronous student collaboration via tools like Google Docs, Miro, etc.

Some of the above techniques will fit the online synchronous delivery, and others work well for both the synchronous and asynchronous formats.

It was also noted that the focus is on pedagogy, not the medium (Teach Remotely, n.d.). The same mediums used in the residential classroom, such as texts, videos, and cases, are just as effective in the online asynchronous and synchronous learning environment. Learners can continue to work with these mediums as they are built into the class structure.

Best practices are also noted when considering the asynchronous–synchronous mix and covering content. If you rely on lectures in the residential classroom, you may want to adapt this in the online classroom. Consider breaking the material into smaller lecture segments, which can provide other opportunities during the synchronous section. The lectures can be recorded in smaller segments if taught in asynchronous formats. Instructors may not need to create new materials; they can just adapt them to the online environment. It is about adapting and allocating the course content to your teaching modality.

Setting classroom norms was also identified as a best practice (Teaching Remotely, n.d.). For synchronous classes, provide clear expectations for student participation and build in stretch times. Here is an example of language to include in a syllabus.

> “Our class will meet through the Zoom online conference system. Our success as an online class will depend on the same commitment we all bring to the physical classroom. We will adopt the same rules and norms (take notes; participate by asking and answering questions; wear classroom-ready clothing). For everyone’s benefit, join the course in a quiet place whenever possible. Turn on your video whenever possible. Mute your microphone unless you are speaking. Close browser tabs not required for participating in class.” (Teaching Remotely, n.d.).

There should also be norms and expectations around audio quality by using a good headset and a high-quality mic. Harvard also noted that when it comes to technology, less is more. It is better to use fewer tools effectively than many tools ineffectively. It is also essential to familiarize yourself with whatever platform is used to teach synchronously, and the learning management system (LMS) used to manage the course, focusing on effectively using a few tools well.

There are also accessibility best practices when teaching online (Teaching Remotely, n.d.). If teaching synchronously, Zoom can create a transcript or closed captioning throughout the class session, which students may find helpful as they learn the material. Sharing slides, transcripts, chat logs, videos, etc., for students to download may

support students needing more processing time. Instructors should carefully select resources and use those that have more built-in accessibility features.

Stanford University

Stanford University has a Teaching Commons site on its webpage. It is an area "where all members of the Stanford community find resources, consider solutions, and explore strategies curated from across the university to enhance their teaching and learning practices" (Teaching Commons, n.d.). The site includes guidelines and suggestions for remote teaching in both the synchronous remote and fully online course formats, with the key points discussed below.

There are different options for teaching an online course, one being synchronous with live class sessions. In this format, an online platform such as Zoom would be used. Stanford notes that the synchronous format is effective for small discussion-based classes as well as large lectures. Pedagogical recommendations for Zoom include using slides and screen sharing, displaying an agenda, using chat with chat monitors, and utilizing breakout rooms. It is important to "rethink classroom activities to make the class more interactive" by using live polls or Google Forms. (Teaching Commons, n.d.). Zoom has live captioning and narration options that improve class accessibility. Teaching Commons (n.d.) found that a synchronous component can increase the sense of community while decreasing the feeling of isolation.

Pre-recorded lectures can also be used when teaching online. Videos should be kept short and lively, and accessibility should be considered when speaking. Make sure to use a high-quality microphone. Interaction can also be integrated with the lecture material by setting up a discussion board or using a quiz. This provides flexibility for students to engage with the content on their schedule. However, it was noted that "students may feel less personally engaged and less satisfied without the social interaction between their peers and instructors. Also, the course material may be misunderstood or have the potential to be misconstrued without real-time interaction" (Teaching Commons, n.d.).

Teaching Commons (n.d.) calls out the importance of rethinking online assignments. Instructions should be clearly communicated, as students will not have opportunities that typically occur in the face-to-face setting for simple clarifications about due dates, requirements, and expectations. Assignment instructions should be clear, explicit, and meticulous while keeping them simple. Online coursework is best if large assignments are chunked into smaller pieces and if there is a routine with repeating assignment types and predictable due dates.

Practices for Effective Online Teaching. The Teaching Commons shares a top ten list for teaching online.

1. Create opportunities for students to connect with you, as the instructor, and with each other as a peer learning community.
2. Make all course material accessible online.
3. Pick one digital "home space" and link any additional resources from the home space.
4. Ask students about their online learning experience (at various check-in points).
5. Establish class norms and expectations for online learning.
6. Vary the class activity types to reach different learners and to keep the class engaging.
7. Connect students to multimedia resources.
8. Establish clear expectations for how and when you will be available for support.
9. Streamline your curriculum to make room for getting used to the learning environment.
10. Ask for support. You are not alone.

North Carolina State University

In a teaching resource, North Carolina State University states, "To fully engage students, we must attend to their emotional engagement and inspire their behavioral engagement in order to support them in reaching the ultimate goal: cognitive engagement" (NC State University, 2024). It is important to build a classroom in all senses of the word – a place of learning, community, and connection with peers and the instructor. Motivating and interacting with students online requires a different approach than in the traditional classroom.

The article also discusses four different strategies to increase the level of engagement: "Humanize your course," "Communicate clearly and consistently," "Remove barriers to engagement with content," and "Foster community" (NC State University, 2024). The first area involves building relationships and getting to know the students in the class. It also is about the students getting to know the instructor through an introduction and ongoing communication. Understanding your students as people and communicating with them beyond class time is a way of building relationships. The second area includes regular, planned communication. Students can rely on this communication when it starts with a clear introduction to the course and includes expectations and feedback throughout the learning experience. Also, the modules in the learning management system need to be well-constructed. The third area is about eliminating obstacles within the course. This starts with a clear explanation of the purpose of the course. It includes creating a welcoming and inclusive environment. Additionally, the material should be delivered in reasonable time segments so it's more manageable. The fourth area is about building a learning community among the students through their discussions and work together (NC State University, 2024).

Best Practices at a Private Midwestern University

As two professors at a private midwestern university, we continue to learn and refine our teaching pedagogy, curricular instruction, and course design methods in our synchronous online courses. These efforts have been an iterative process of learning what works well for educating and engaging students throughout the class experience.

Our best practices for engagement in online learning are in our five-part SYNCH framework outlined here.

1. **S**etting expectations and standards for a high-quality experience.

    - Robust learning occurs to achieve all learning objectives
    - High expectations for students and faculty that are clearly communicated
    - Significant customized feedback on assignments so they can learn and make ongoing progress

2. **"Y**ou" orientation toward students by developing rapport and mentoring them by providing regular communication to support their success and progress toward career goals.

    - Student and instructor video introduction discussion post
    - Updates on opportunities for internships, jobs, and online co-curricular campus activities
    - Networking experiences with alumni and business leaders

3. **N**otifying students with regular course communication in a consistent format.

    - Announcements in the LMS
    - Detailed and timely feedback in the grading area of the LMS

4. **C**onnecting with students for one-on-one appointments when they have questions and concerns.

    - Remote office hours
    - Have accessibility beyond regular office hours to meet students when it works for them
    - Flexibility on when and how to meet with students
    - Availability before and after class

5. **H**olding well-planned, engaging, synchronous class meetings.

    - Organized well-timed agendas to maximize learning outcomes
    - Post agenda in advance in the LMS
    - Updates at the beginning and "look ahead" time at the end of class
    - During class, use various interactive tools to keep the class moving and engaging, such as breakout rooms, chat feedback, large group discussions, and utilizing Google Docs
    - Maximize class time, balance between being planned, structured and organized and having flexibility to meet student needs as questions arise

For example, in an online course, the content in the weekly modules should be in a consistent order, such as the weekly: (1) learning objectives, (2) checklist, (3) reading notes, (4) agenda and a Zoom link for synchronous class sessions, (5) dropbox for each assignment, (6) link to the discussion board, (7) handouts about projects and (8) other relevant information. This information and the instructor's recording are conveniently and consistently organized in one place – the weekly module.

This intentional design is aligned with "choice architecture" (Thaler & Sunstein, 2021, p. 18). The nudging factors include the weekly module, posting the agenda in the announcements, and emailing it to the students. Nudges such as due dates appear on the calendar in the students' LMS. For synchronous classes, additional nudges include reminders and check-in time at the start of the class, which consists of a review of upcoming work and respective due dates and also involves intentional time for students to ask clarifying questions throughout the class meeting. For asynchronous classes, announcements, email messages, feedback on assignments, and the weekly checklist are examples of nudges. Best practices such as these also align with the CoI as we are intentional about the importance of the cognitive, social, and teaching presence.

Conclusion

Engagement in online learning is critical to the learning experience. The theoretical framework of the Nudge Theory identifies some strategies that can be used to encourage and motivate students and keep them on track in an online learning environment. The CoI framework addresses the importance of interaction between the core elements of cognitive, social, and teaching presence, which is the foundation of an effective online learning experience.

In our review of best practices from Harvard University, Stanford University, North Carolina State University, and a private midwestern university, we identified four essential themes important to maximizing engagement in online learning. These themes are:

1. Communicating clearly and consistently throughout all aspects of the course
2. Building relationships with students
3. Using technology intentionally and a well-organized LMS to maximize student learning outcomes
4. Creating interactive synchronous class sessions

Implementing the discussed best practices can lead to increased engagement and connection in online learning, resulting in a high-impact course.

References

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education model. The Internet and Higher Education, 2(2–3),87–105. https://doi.org/10.1016/S1096-7516(00)00016-6174 H. WEST ET AL.

https://www.sciencedirect.com/science/article/abs/pii/S1096751600000166?via%3Dihub

https://operations.du.edu/sites/default/files/2020-05/Garrison_Anderson_Archer_Critical_Inquiry_model.pdf

Lamm. M. (June 5, 2023). The Importance of Building a Community of Inquiry in Your Online Course. CTL Blog. https://ctl.jhsph.edu/blog/posts/Importance-of-COI/

NC State University (2024). Engagement in synchronous and asynchronous environments. DELTA Teaching Resources. https://teaching-resources.delta.ncsu.edu/engagement/

Office of Teaching and Learning: Inclusive Teaching Practices (n.d). University of Denver. https://operations.du.edu/inclusive-teaching/community-inquiry-model

Stanford Teaching Commons. (n.d.). Stanford University. https://teachingcommons.stanford.edu/

Teaching Remotely. (n.d.). Harvard University. https://teachremotely.harvard.edu/

Thaler, R.H. & Sunstein, C.R. (2021). *Nudge the final edition.* Penguin Books.

West, H., Hill, J., Abzhaparova, W., Cox, W. & Alexander, A., (2024). Pandemic pedagogies: Reflecting on online learning using the community of inquiry framework. *Journal of Geography in Higher Education, 48*(2), 157–176. https://doi.org/10.1080/03098265.2023.2190962

Thaler, R.H. & Sunstein, C.R. (2021). *Nudge the final edition.* Penguin Books.

POTENTIAL DISCRIMINATORY PRACTICES RELATED TO WORKING REMOTELY

David M. Savino

Ohio Northern University

Danielle C. Foster

Ohio Northern University

Abstract

There are numerous implications to the recent "return to the office" push from the evolving influences on corporate culture, job redesign, the role of technology, and the significant potential for unequal treatment and discrimination. Recent research and studies indicate that the workers involved in remote work are most likely to be women, workers of color, and the disabled. While remote work is not a protected classification under state or Federal law, these individuals are members of protected classes as determined by fair employment law. Therefore, disputed and evolving policies regarding the use of remote work related to these individuals could easily result in wholesale practices that create work disadvantages and unfair treatment in personnel decisions. This is a study to examine the current efforts in the creation and application of flexible work policies and practices and how they may affect workers in this new work culture and environment.

Introduction

Most people would agree that the disruptive force of COVID-19 and the pandemic created a new paradigm for how work is conducted on a day-to-day basis. As the years have gone on since the pandemic, organizations have worked hard to develop and maintain a new normal of how to do business that can address the changes brought on as a result of COVID-19 while at the same time creating a thriving and productive work environment. Designing new work paradigms has been an effort to combine the sociological aspects along with the heavy dependence on technology. Remote work is now a mainstay of the work procedure. By 2025, it is estimated that 32.6 million Americans will be working remotely, about 22 percent of the workforce (Nekvinda, 2023). In addition, in 2019, 60 percent of remote-capable employees worked fully on-site whereas it was reported to be about 20 percent in 2023 (Wigert et al., 2023).

As the changes brought about by the pandemic became better established, situations resulted that not only challenged corporate culture but also created changes in organizational design, especially related to working remotely. With the greater emphasis on remote work, digital leadership challenges became clear as related to productivity, oversight, and the treatment of remote employees that might be viewed as being discriminatory (Kiehner, 2021).

While remote work in and of itself offers numerous benefits to both employers and employees, the potential exists for the degrading of constructive and productive work relationships. Absentee workers may be summarily disregarded, forgotten, and treated in a fashion that may be less likely to occur if they were present in physical settings working closely together and regularly interacting to achieve work objectives. Therefore, because of this, situations may inevitably arise whereby social, emotional, and economic marginalization disadvantage or harm those who belong to certain groups such as having less access to work opportunities, resources, and career advancement (Cubrich et al., 2022). For example, social and economic marginalization may take the forms of structural racism, hiring discrimination, and biased work and personnel policies (Allan et al., 2021).

Conditions of Potential Precarity, Marginalization and Discrimination

The disruptive force of COVID-19 and the pandemic created a significant paradigm shift related to organizational culture, evolving work procedures, and workplace mindsets. This change created major challenges for workers, as well as management, especially in the area of adopting and adjusting to a culture that is based on the reliance on technology and the fact that many employees would be working from home (Howard-Greenville, 2020). The move away from occupied workplaces, meetings, water cooler chats, and sharing ideas was replaced with worker isolation and constant Zoom calls (Spicer, 2020). By definition, these new work arrangements created what some might characterize as "precarious" with arrangements that may be risky, temporary, part-time, insecure, uncertain, and lack work benefits, rights, or legal protections (Benach et al., 2014; Kallenberg & Vallas. 2017). Workers facing marginalization can be a function of and the result of behavioral, social, or legal categorization that creates precarious situations, resulting in several consequences such as discrimination.

In the years since COVID-19 and the pandemic, many workers have continued to work from home and various remote locations. Many employers have experienced and reluctantly adjusted to a corporate culture that involves, at least in some part, the acceptance of remote as a normal work routine mostly because workers over the last few years have come to be comfortable with the situation and in many cases demand it. Despite the fact of the acceptance by both employers and employees to use remote work as a viable work option, the possibility exists, and some recent events have shown that adverse consequences may arise from working in a remote environment (Huang, 2021). By the mere nature of working remotely outside of a formal office setting many employers suspect that workers have taken advantage of unmonitored situations where inappropriate behavior and a general lack of productive work is the norm and that misconduct in the use of an employer's resources and time is commonplace. In addition, regardless of the work ethic of a remote employee, these work protocols may lead to knowingly or unknowingly taking advantage of the worker in light of their absence in their abilities to promote, protect, represent, or defend their work output which may lead to remote work discrimination.

Discrimination in Remote Work Settings

By definition, remote work discrimination is any form of discrimination against employees who work remotely, either partially or fully outside of a traditional office setting (Madell, 2024). It is the result of disparate treatment of employees who work from home in terms of working conditions compared to in-person workers and while remote workers are not a protected class, unequal or unfair treatment could result in risks to be dealt with by employers if complaints are filed with the EEOC (Jones, 2023). When working remotely various characteristics of employees may be more salient and emphasized which could easily result in stigmatization and stereotyping as defined by a two-dimensional virtual workspace (Tommasi et al., 2024).

Discrimination in remote settings can take on many forms and practices. This section of the paper explores areas of discrimination in remote work settings, such as disability, age, parental status, pregnancy, race, religion, and proximity biases. The authors used existing scholarly research and real-world examples from companies to examine the biases and strategies to promote equity in remote work.

Disability and Remote Work

Immense potential exists for employees with disabilities in remote work due to removing physical barriers, thus allowing for workspaces at home that can be tailored to an individual's needs (Smithey, 2024). Employers often State a belief that commitment and or productivity will suffer if employees are allowed to work from home; however, moving remote work during the pandemic has proven that many employees are often more productive and provide more lucrative results in work-from-home environments (Smithey, 2024). Many factors, such as not having to navigate a wheelchair through snow, show significant increases in productivity for disabled people. People with disabilities can often be enabled to help manage their treatments, energy, exposure to other illnesses, pain levels, and overall health care when they can work remotely and in flexible work positions (Addressing Bias, Stigma, and Discrimination in a Virtual Work Environment, 2022). Companies face the risk of ableism when they deny remote work to employees who are forced to return to the office due to many mandates that we are currently seeing. Ableism is prejudice or discrimination against people with disabilities, and it is based on the idea that people with

disabilities are less valuable than people without disabilities (Addressing Bias, Stigma, and Discrimination in a Virtual Work Environment, 2022).

Age Discrimination in Remote Work

Long recognized in traditional workplaces, age discrimination has taken on a new dimension in remote workplace settings. Many stereotypes about older workers exist, including being less technologically savvy and being unwilling to adapt to or learn new technologies (Addressing Bias, Stigma, and Discrimination in a Virtual Work Environment, 2022). These stereotypes can manifest into workplace biases, such as assuming they cannot navigate virtual platforms, denying them training on advanced technology or systems, and limiting their participation in advanced tech-driven projects (Addressing Bias, Stigma, and Discrimination in a Virtual Work Environment, 2022). Ageist assumptions may also influence decisions about promotions and layoffs due to the reduced visibility of remote environments (Addressing Bias, Stigma, and Discrimination in a Virtual Work Environment, 2022). Despite much evidence showing that older workers are just as capable of leveraging and learning technology as their younger counterparts, massive biases persist and create barriers to equal opportunity (Addressing Bias, Stigma, and Discrimination in a Virtual Work Environment, 2022).

IBM: Case Study on Ageism

According to an article from the New York Times (2022), IBM faced allegations of systematically reducing its workforce of older employees, highlighting claims from former employees who argued that the company systematically targeted older workers for layoffs and restructuring. The piece reveals that many internal communications were uncovered where top-level executives referred to older employees as dino babies who need to be extinct (Scheiber, 2022). The piece details various legal actions taken against IBM, including a notable finding from the Equal Employment Opportunity Commission (EEOC) that supported the accusations of age discrimination. When the EEOC found evidence supporting these claims, it intensified scrutiny of the company's long-standing employment practices that favor younger talent. It sparked a broader discussion about age discrimination in the Tech industry (Scheiber, 2022).

Parental Status, Pregnancy, and Caregiver Discrimination

Parental status and caregiver discrimination in remote work can occur when an employee is treated unfairly for their duties to their family responsibilities and roles. Many Americans' daily reality is caring for their parents, children, or chosen family. (National Women's Law Center, 2023). Unfortunately for these caregivers, who are oftentimes mostly women and or women of color, they are unfairly stereotyped that they cannot carry on their full-time duties by their employer because of their caregiving duties. According to the National Women's Law Center (2023), family responsibilities discrimination, often called caregiver discrimination, is a form of employment discrimination against working people based on their caregiving responsibilities. There are numerous examples of caregiver discrimination, such as refusing a father's request for time off to care for a new child, refusing to hire a candidate because they mentioned in an interview that they were a primary caretaker of an aging parent, or the promotion of a new young mother knowing that she will have caregiver roles at home. According to the Work-Life Law Center at the University of California (2020), 43% of American workers are family caregivers, providing care to a child, an adult with a disability, or a family member of advanced age.

There are no federal laws that explicitly prohibit discrimination against caregivers. However, a handful of federal laws contain provisions that can be interpreted by the courts to prohibit caregiver discrimination in some contexts. Some federal laws that can be interpreted by case include Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act, The Pregnancy Discrimination Act, The Pregnant Workers Fairness Act, the Providing Urgent Maternal Protections (PUMP) for Nursing Mother Act, Americans with Disabilities Act, and The Family Medical Leave Act (National Women's Law Center, 2023). In addition to some federal laws, many local and state laws expressly prohibit discrimination against caregiver discrimination. According to research from the Center for Work-Life Law (2020), one hundred and ninety-five counties, cities, and states have laws prohibiting caregiver discrimination in some forms. The Center for Work-Life Law (2020) goes on to state that four states, Delaware,

Alaska, New York, and Minnesota, prohibit entirely caregiver discrimination due to minor children, and in Delaware, the law goes further to also protect employees caring for adult relatives.

Examples of companies found liable for parental discrimination include JP Morgan Chase and Estee Lauder (MacArthur, 2020). According to MacArthur (2020), in May of 2019, the EEOC obtained a five-million-dollar settlement from JP Morgan Chase due to their discriminatory policies on parental leave that provided men less leave time than it did for women's caregiver leave time. Estee Lauder was also fined 1.1 million dollars in July of 2018 for a similar case (MacArthur, 2020). It is imperative to note that remote workers are not a protected class, and those pursuing a claim of remote work discrimination can face significant obstacles. A vast amount of research suggests that if employees believe that their rights are being ignored, there are many steps that they can take to build a better case, such as seeking legal expertise, seeking accommodation advice, having clear negotiation skills, reviewing employment contracts, and documenting as much as possible (Ian, 2024). Well-drafted documentation strengthens an employee's position and can be crucial in potential legal proceedings and disputes (Ian, 2024).

Federal Executive Order Requiring Federal Government Employees to Return to Office

The United States' largest employer, the Federal government, just ordered its workers back into the office five days a week based on Donald Trump's first day in the Oval Office as he signed an executive order that mandated all federal employees return to their cubicles (Burleigh, 2025). The order will affect three million people employed by the US government who are currently working remotely, many of whom have operated on a fully remote or hybrid basis for many years (Burleigh, 2025). Although the stereotypes and myths have been debunked, many CEOs, including the current President, still believe that working remotely diminishes productivity and disrupts innovation. Employers that recently called their employees back to the office include Amazon, AT&T, JPMorgan, Google, EY, Microsoft, Apple, and Goldman Sachs (Burleigh, 2025). According to Fortune (2025), President Trump's mandate on federal workers will have a broader influence on other organizations' work-from-home policies, with predictions of a wave of return-to-office orders. How this will affect individuals is yet to be seen. Burleigh (2025) pointed out that America's Workforce is aging, and Gen Z and Millennials are poised to take over the most significant part of the labor force in the upcoming years. Those Generations value flexible work schedules more than any other generation. Research shows that half of Gen Z reported that they would quit their jobs if forced into the office over 3 days a week, while numerous union leaders share that return-to-office mandates won't make the government more efficient and could have some unintended consequences such as mass resignations (Vlamis, 2025). Vlamis (2025) shares that with federal salaries being much lower than the private sector salaries, family and flexible work practices have become very important, and the current practices of RTO will reduce the ability to recruit and retain the talent that it needs to stay competitive. Burke (2023) notes that many in leadership do not realize that when the return to office mandates are enacted, they often trigger an innate response to oppose it. Burke (2023) states that it is a well-studied behavior reaction referred to as psychological reactance, and it is the human resistance to something that threatens behavioral freedoms.

Policy Implications

The increased use and reliance on remote work creates a new set of policies and procedures along with work expectations. It is therefore extremely important for Human Resource managers to address the possible situations, issues, and potential problems that may come from working remotely as a main way of doing business for some employees. In conjunction with top management, informed Human Resource managers need to have undergone a thoughtful and complete analysis to ensure that remote work is done right with minimal occurrences of employer and employee dissatisfaction and complaints related to discrimination. Managerial policies and practices devoted to encouraging openness related to diversity and inclusive participation in organizational dynamics may reduce the occurrence and severity of discrimination in the first place (Tommasi et al., 2024). Of course, in light of current political developments, the practice of DEI initiatives may prove to be difficult to apply successfully in a climate of significant revisions and dismantlement. In such dynamic work environments, Human Resource managers, as well as organizations, must play a crucial role in helping employees adapt to new work environments and associated conditions, especially through the formulation of policy and the use of company-sponsored education programming (Mutongerwa & Matebese, 2024, Tomassi et al., 2024). Key strategies are being formulated by

organizations to address issues of remote work and its consequences. Examples of successful strategic policies that are being implemented as reported by the Harvard Business Review involve the following (Williams et al., 2021);

1. Provide adequate notice as to workable timetables for remote work to begin and possibly end.
2. Acknowledge and understand that developing remote work experiences generally involve making provisions on a case-by-case basis.
3. Create a hybrid model involving remote work that is best suited for the organization that results in a win-win arrangement that is supportive and successful.
4. Avoid on-site favoritism that provides for advancement opportunities and desirable assignments for all employees regardless of location.
5. Always schedule meetings to accommodate all team members to avoid the potential for marginalization, overshadowing, and feelings of inferiority.

Human Resource Management (HRM) has embraced in a significant way the encouragement of an inclusive and equitable workplace. The fostering of inclusivity aligns with societal values that enhance organizational performance and innovation within a legal framework grounded in anti-discrimination laws among them being the Civil Rights Act, of 1964, the Age Discrimination and Employment Act of 1967, and the Americans with Disabilities Act of 1990 (Ezeafulukwe et al., 2024).

Best practices of the hybrid workplace should include creating a workplace value proposition, empowering the team, overhauling performance management and its assessment, additional training for managers and their teams, and being aware and ultimately accepting the real estate bust and implications for physical office space investments (Wigert et al., 2023). In addition, it is interesting to note that in a remote work environment, employees generally want managers to be present, hands-on, and operationally vigilant without being intrusive or driven to be micromanagers but instead to micro-understand the nature of their work (Krishnamonorthy, 2022). The Fourth Industrial Revolution (4IL), with its emphasis on technology integration, is a driving force for progressive management styles as part of a strategic imperative to thrive in an environment that promotes inclusive employment in a diverse and dynamic world (Ezeafulukwe et al., 2024). Progressive management techniques embrace the idea that managers should be enablers and not enforcers who should be in the game without being on the field to promote employee engagement through trust and compassion (Krishnamonorthy, 2022). Organizations and Human Resource managers must be ready to lean into the advantages offered by remote work and overcome the challenges.

Conclusions

The pandemic created a dynamic environment that requires an amount of analysis and consideration regarding an informed response related to a fair and equitable workplace. The combination of new information and technology innovations in flexible work situations inevitably created novel work settings and space for discrimination and other counterproductive forms of employee interactions that presented new managerial challenges (Tommasi et al., 2024). It appears to be increasingly important to adopt a worker-centric system that supports and uplifts those workers operating in a new paradigm of yet unknown long-term consequences (Cubrich et al., 2022). The rapidly changing work landscape has ushered in the Fourth Industrial Revolution (4IR). This exponentially transformative era is reshaping all facets of life, including the workplace in terms of innovation and the ever-evolving use of technology (Tsephe & Makoele, 2024). In light of this, it is the responsibility of Human Resource managers to make sure that all employees, whether they work remotely or not feel valued with ample work opportunities free from favoritism or discrimination. With a new workplace paradigm in place, employees have a new concept as to how they will work and obviously, remote work and some type of hybrid model will be more of the norm as time goes on. The important thing to remember is that all efforts must be made that these new work protocols and procedures offer everyone equal access and equal opportunity.

References

Allan, Blake., Autin, Kelsey., & Wilkins-Yel, Kerrie. (2021). Precarious work in the 21st century: A psychological perspective. Journal of Vocational Behavior, 126, 103491. https://doi.org/10.1016/ j.jvb.2020.103491

Addressing bias, stigma, and discrimination in a virtual work environment. (2022, June 27). *https://www.apa.org*. https://www.apa.org/pi/health-equity/virtual-work

Benach, Joan., Vives, Alejandra., Amable, Marcelo., Vanroelen, Christope.,Tarafa, Gemma., & Muntaner, Carles. (2014). Precarious employment: Understanding an emerging social determinant of health. Annual Review of Public Health, 35, 229–253. https://doi.org/ 10.1146/annurev-publhealth-032013-18250

Burleigh, E. (2025, January 23). *Donald Trump and CEOs are all pushing a return to the office. Workers hate it. Who will win?* Fortune. https://fortune.com/2025/01/23/donald-trump-rto-workers-employers-wfh-wars/

Case, T., & Case, T. (2025, January 23). *Trump's war on remote work clashes with RTO rebellion as some WFH roles spike*. WorkLife. https://www.worklife.news/culture/trumps-war-on-remote-work-clashes-with-rto-rebellion-as-some-wfh-roles-spike/

Cubrich, Marc., Tengesdal, Joren., Ugueto-Rey, Gustavo., Stahl, Rachel., & Crow Bauer, Megan. (2022). Pandemics and Precarious Work: Translating Research to Practice for Marginalized Workers. Traditional Issues in Psychological Science. Volume 8., Number 3.

Ezeafulukwe, Catherine., Onyekwelu, Somtochukwu Cynthi., Onyekwelu, Njideka Phina., Ugochukwu Ike, Chinedu., Bello, Binaebi Gloria., & Franca Asuzu, Onyeka. @024). Best practices in human resources for inclusive employment: An in-depth review.

Freedman, R. (2023, November 2). Return-to-office policies are triggering discrimination battles. *Legal Dive*. https://www.legaldive.com/news/return-to-office-policies-mental-health-discrimination-employment-law-eeoc-lenhart-disclo/698625/

Ian. (2024, January 19). *Balancing remote work and parenting: legal considerations*. Achkar Law. https://achkarlaw.com/remote-work-and-parenting-legal-considerations/

International Journal of Science and Research Archive. Retrieved from https://ijsra.net/content/best-practices-human-resources-inclusive-employment-depth-review

Haung, Julia. (2021).Workplace Discrimination in the Remote Environment. OnLabor. December 22. Retrieved from https://onlabor.org/workplace-discrimination-in-the-remote-environment/

Howard-Grenville, J. (2020). How to sustain your organization's culture when everyone is remote. MIT Sloan Management Review, June, 1–4.

Jones, Will. (2023). What Is Remote Work Discrimination? Independent Agent. Retrieved from https://www.iamagazine.com/markets/what-is-remote-work-discrimination

Kalleberg, Anre. L., & Vallas, Steven. Peter., (Eds.). (2017). Pre-carious work. Emerald Group Publishing. https://doi.org/10.1108/S0277-28332017

Kanfer, R., Lyndgaard, S. F., & Tatel, C. E. (2020). For whom the pandemic tolls: A Person-Centric Analysis of Older workers. *Work Aging and Retirement*, *6*(4), 238–241. https://doi.org/10.1093/workar/waaa014

Kiehner, Elizabeth (2021). The Phenomenon of Work and The New Working Paradigm. Forbes. September 10. Retrieved from https://www.forbes.com/sites/forbeshumanresourcescouncil/2021/09/10/the-phenomenon-of-work-and-the-new-working-paradigm/?sh=7a103d3a161d

Krishnamoorthy, Raghu. (2022). What Great Remote Managers Do Differently. Harvard Business Review. October 26. Retrieved from https://hbr.org/2022/10/what-great-remote-managers-do-differently

MacArthur, H. V. (2020, May 6). Parental discrimination: What companies should be considering during and after COVID-19. *Forbes*. https://www.forbes.com/sites/hvmacarthur/2020/04/29/parental-discrimination-what-are-the-legal-implications-companies-should-be-considering-during-and-after-covid-19/#:~:text=The%20truth%20is%2C%20there%20is,as%20compared%20to%20childless%20workers.

Madell, Robin. (2024) Is There Such a Thing as Remote Work Discrimination? FlexJobs. Retrieved from https://www.flexjobs.com/blog/post/thing-telecommuting-discrimination/

Mutongerwa, Normah Fadzai, and Hlalele Matebese. (2024). Dynamics of Remote Working: A Human Resource Management Headache and Test of Time. Retrieved from https://www.researchgate.net/profile/Hlalele-Matebese/publication/378123881_Dynamics_of_Remote_Working_A_Human_Resource_Management_Headache_and_Test_of_Time/links/65c778f134bbff5ba7fa44a6/Dynamics-of-Remote-Working-A-Human-Resource-Management-Headache-and-Test-of-Time.pdf

National Women's Law Center. (2023, August 14). *Protecting Caregivers from Workplace Discrimination - National Women's Law C*enter. https://nwlc.org/resource/protecting-caregivers-from-workplace-discrimination/#

Nekvinda, Audrey. (2023). Remote Work Legal Considerations: What You Need to Know. Hubstaff. November 30. Retrieved from https://hubstaff.com/blog/remote-work-and-legal-considerations/

Remote Workers Are Losing Out on Promotions, New Data Shows. (2024, January 11). *The Wall Street Journal*. https://www.wsj.com/lifestyle/careers/remote-workers-are-losing-out-on-promotions-8219ec63

Scheiber, N. (2022, February 12). Making 'Dinobabies' Extinct: IBM's Push for a Younger Work Force. *The New York Times*. https://www.nytimes.com/2022/02/12/business/economy/ibm-age-discrimination.html

Smithey, J. (2024, February 27). *Discrimination in remote work environments*. Smithey Law Group LLC. https://smitheylaw.com/discrimination-in-remote-work-environments/#:~:text=This%20could%20be%20due%20to,in%20direct%20discussion%20when%20possible.

Spicer, Andre. (2020). Organizational Culture and COVID-19. Journal Of Management Studies, 57(8), pp. 1737-1740.

The COVID-19 pandemic and caregiver discrimination under federal employment discrimination laws. (2022, March 14). US EEOC. https://www.eeoc.gov/laws/guidance/covid-19-pandemic-and-caregiver-discrimination-under-federal-mployment#:~:text=Depending%20on%20the%20circumstances%2C%20this%20also%20may,Labor%2C%20or%20similar%20state%20or%20local%20laws.

Tommasi, F., Ceschi, A., Sartori, R., Trifiletti, E., Vignoli, M., & Dickert, S. (2024). Discriminations in remote work contexts: The pivotal role of diversity and equality management. *International Journal of Workplace Health Management, 17*(4), 301–318. https://doi.org/10.1108/IJWHM-02-2024-0022

Tsephe, Refiloe., & Makoele, Lipalesa. (2024). Rethinking Pedagogy in the 4IR and Innovation-Driven Economy: Challenges and Opportunities. Proceedings: 18th International Technology, Education and Development Conference. Retrieved from https://library.iated.org/view/TSEPHE2024RET

Vlamis, K., Nelken-Zitser, J., & Li, K. (2025, January 22). *Union leaders push back on Trump's RTO mandate, saying it won't make the federal government more efficient*. Business Insider.

https://www.businessinsider.com/union-leaders-condemn-trump-federal-workers-return-to-office-mandate-2025-1

Wigert, Ben., Harter, Jim., & Agrawal, Sangeeta. (2023). The Future of the Office Has Arrived: It's Hybrid. Gallup. October 9. Retrieved from ttps://www.gallup.com/workplace/511994/future-office-arrived-hybrid.aspx

Williams, Joan C., Korn, Rachel M., & Boginsky, Mikayla. (2021). Don’t Lose the Democratizing Effect of Remote Work. Harvard Business Review. August 4. Retrieved from https://hbr.org/2021/08/dont-lose-the-democratizing-effect-of-remote-work

STATISTICAL ANALYSIS

Steve Roussas

Purdue Global University

Abstract

Kirk, Thomas, Stewart, Hubbard & Ryan, Thompson, and Vacha-Haase commonly argue alternative methods to Statistical Significance Testing such as Meta Analysis, Effect Size, Replication, Confidence Intervals, Graphical Methods, and Ordinary Least Squares. Score reliability is also a concern while performing SST. Therefore, this paper is about evaluating SST methods and assessing their effectiveness in decision making. It will start with evaluating the Z test and T test then continue with the evaluation of the ANOVA (the F test). Chi Square and the Regression Analysis is next. It will end with discussion of the decision-making process, as a result.

Statistical Significance Testing

Statistical Significance Testing (SST) is used to analyze and compare variance of populations. It is based on the belief that an event is statistically significant, and it is unlikely to have occurred by luck. Specifically, in traditional statistical hypothesis testing, the Significance Level of a test is the maximum probability of rejecting a Null Hypothesis. The significance of a conclusion is also called its p-value, which is a measure of how much evidence we have against the Null Hypothesis. The smaller the p-value, the more evidence we have against Null Hypothesis. It is also a measure of how likely we are to get a certain sample result or a result "more extreme," assuming Null Hypothesis is true. SST is a tool researchers use to make decisions on whether a tested observed outcome varies from the expected outcome of a population to consider that there is a statistical difference between the tested average and the hypothesized average of a population. Making decisions based on an observed outcome is part of the process of assessing the relative possibility of one hypothesis against another. In practice this is done by setting up two hypotheses, the Null Hypothesis and the Alternative Hypothesis.

The following describes the process that makes the SST based decision-making systematic (Pelosi et al., 2001). The first step of the process is to state the Null Hypothesis, denoted by H_0, to be tested. Based on the conclusion of the test, the Null Hypothesis is either rejected or not rejected. When the Null Hypothesis is not rejected based on the sample data, it will not necessarily imply that the Null Hypothesis is true, meaning the applied test failed to disprove H_0. The Alternate Hypothesis, denoted by H_1, is also defined and it describes what will be concluded if the Null Hypothesis is rejected. The second step is to select a Level of Significance, which is denoted by the Greek letter alpha (α). There is no one level of significance that is applied to all tests. Traditionally, the .05 level is selected for consumer research projects, .01 for quality assurance research projects, and .10 for political research/polling. The third step is to select the Test Statistic such as the z, t, F (ANOVA), or X^2 (chi-square).

Statistical analysis helps us collect and analyze data in order to discern patterns and trends. It removes bias from evaluating data by employing numerical analysis. This technique is useful for collecting the interpretations of research, developing statistical models, and planning surveys and studies. Statistical analysis is a scientific tool in AI and ML that helps collect and analyze large amounts of data to identify common patterns and trends to convert them into meaningful information. In simple words, statistical analysis is a data analysis tool that helps draw meaningful conclusions from raw and unstructured data (Simplilearn, 2024).

The z-test is used to find significant differences between sample mean and population mean (z-test, 2005). For example, in hypothesis testing for large samples greater than thirty, the Test Statistic (z) is computed by: $z=(\tilde{Y}-\mu)/(\sigma/\sqrt{n})$. Where (μ) is the mean of the population, $\tilde{Y}$ is the average of the sample, and (σ) is the standard deviation of the population. The t-test is commonly used to find significant differences between sample mean and population mean of samples sizes less than thirty. It is calculated similar to z-test by using the standard deviation of the sample. The t-test also assesses whether the means of two groups are statistically different from each other (T-test, 2005).

The fourth step is a statement of the specific conditions under which the Null Hypothesis is rejected or not rejected based on the conclusion of the applied test. The fifth and final step calculates the Test Statistic, which is measured to the critical/statistic value, and finalizes a decision to reject or not to reject the Null Hypothesis. Once the z, t, or F-value has been calculated, the z, t, or F critical/statistic value is obtained from a table of significance to test whether there is significant difference.

SST, for example, can be used to verify and validate the average number of cigarettes smoked by teenagers. Choosing a Significance Level of 5% to calculate a critical value of a statistic such as the mean of cigarettes smoked by teenagers, the probability of it exceeding the critical value, given the truth of the Null Hypothesis, would be 5%. If the actual calculated statistic value exceeds the critical value, then it is statistically significant "at the 5% level". If the Significance Level is less than 5%, the calculated statistic value will be more statistically significant than a result which is "significant at the 5% level". If the Significance Level is greater than 5%, the calculated statistic value will be less statistically significant than a result which is "significant at the 5% level".

Sir Fisher, one of the early 20th century statisticians, came upon SST while analyzing agricultural data and noticed that variables such as weather, soil quality, and others could not be controlled in the same way as laboratory experiments (Cowles, 1989). Fisher (1925) published Statistical Method for Research Workers. Many of the textbooks on methodology and statistics used his text as the benchmark. A Null Hypothesis was developed by Fischer, which reflects the expected average in a population. Fischer also recommended that a p-value be produced, which is the estimate of the probability of the result being produced from the expected variance in the population average. Given the p-value and the confirmation, the decision-maker can then decide whether it is statistically sound to take the results as being significantly different from the Null Hypothesis.

Fischer's (1925) findings did not go unchallenged for very long. Neyman and Pearson later added components to Fischer's theory by introducing the Type I error, when rejecting a Null Hypothesis that is true and Type II error when not rejecting a Null Hypothesis that is not true. They also introduced the Alternate Hypothesis, which is mutually exclusive to the Null Hypothesis (Glazer, 1999).

Since SST's foundation many researchers and statisticians had resorted to using statistical significance method for testing hypotheses. At the same time many statisticians have questioned and criticized the validity of SST. Cohen (1994) claimed SST does not reveal useful and complete information. It is accepted due to lack of alternative methods of generating such information. Parkhurst (1985) stated, that not rejecting a Null Hypothesis is different from proving it. Not rejecting a Null Hypothesis can lead to different conclusions than proving a Null Hypothesis would. In Yoccuz (1991). asserted that SST provides a poor model of the real issues and tends to lose objectivity. Many statisticians feel that SST has been frequently misused and misinterpreted, therefore they have recommended that it is abandoned as a way for evaluating statistical results (Daniel, 1998). A major controversy in the interpretation of SST has been "the ingenuous assumption that a statistically significant result is necessarily a noteworthy result" (p. 106). Many scientists have long recognized this problem. Tyler (1931) had already begun to recognize a trend toward the misinterpretation of statistical significance:

> The interpretations which have commonly been drawn from recent studies indicate clearly that we are prone to conceive of statistical significance as equivalent to social significance. These two terms are essentially different and ought not to be confused. . . . Differences which are statistically significant are not always socially important. The corollary is also true: differences which are not shown to be statistically significant may nevertheless be socially significant. (p. 115-117)

Despite the years of criticism, SST continues to be the most widely employed model of statistical inference (Daniel, 2003). This paper evaluates ten alternative hypothesis testing models such as ANOVA, Simulations (Replication)and Graphical Methods, Randomized Controlled Trials, Chi-Square Goodness-of-Fit Test, Confidence Intervals, Effect Size, Meta Analysis, Correlation and Simple Least Squares Regression, Impact Ratio, and Two Stage Least Squares Regression Analysis. These alternative testing models are evaluated based on their ability to complement SST or to be used as alternatives.

Therefore, A statistical test provides a mechanism for making quantitative decisions about a process or processes. The intent is to determine whether there is enough evidence to "reject" a conjecture or hypothesis about the process. The conjecture is called the null hypothesis. Not rejecting may be a good result if we want to continue to act as if we "believe" the null hypothesis is true. Or it may be a disappointing result, possibly indicating we may not yet have enough data to "prove" something by rejecting the null hypothesis (NIST, nd).

Alternative Statistical Significance Testing Methodologies

ANOVA

ANOVA is used to discover the main interaction effects of independent variables (called "factors") on a dependent variable (ANOVA Overview, 2005). A "main effect" is the direct effect of an independent variable on the dependent variable. An "interaction effect" is the concurrent effect of two or more independent variables on the dependent variable. ANOVA reveals interaction effects on a built-in basis.

The statistic in using ANOVA is the F-test of difference of group means and helps to determine whether the independent variable's relation to the dependent variable is significant. It tests the means of the groups formed by values resulting from the independent variable interaction with the dependent variable or combinations of values for multiple independent variables. If the group means do not differ significantly then it is inferred that the independent variable or combinations of values for multiple independent variables did not have an effect on the dependent variable. If the group means differ significantly then it is inferred that the independent variable or combinations of values for multiple independent variables have an effect on the dependent variable. To determine the level of significance, multiple nonparametric tests of significance are used to explore which value groups of the independent variables have the most significant role in the relation. If the data involves repeated measures of the same variable, as in before-after or matched pair tests, the F-test is computed differently from the usual between-groups design, but the inference logic is the same (Levine et al., 1999).

Zhang and Sood (2002) applied ANOVA to study how children evaluate brand extension versus the adults. The objective of the research was to analyze and identify the differences in children and adult evaluations of brand extensions. The claim is that children rely more on surface cues versus the adults that rely more on deep cues. One experiment with two replications was performed using three different random sample populations. Using ANOVA as the statistically significance testing method has shown to be an effective tool in determining the effect of the experiment's significant factors. The replication approach by performing two additional experiments validated the results.

Chi-Square Goodness-of-Fit Test

Edison (2004) defines The Goodness-of-Fit Test as "The test used to see if an observed sample distribution is different from a hypothesized population distribution. In other words, it is used to see if what you got is statistically different from what you expected to get" (p. 728). An advantage of using the Chi-Square Goodness-of-Fit Test is that it can be applied to any unit-variance distribution, which can be used to calculate the cumulative distribution function. The value of the Chi-Square Test Statistic is dependent on how the data is binned. One of the disadvantages of the Chi-Square Test is that it requires an adequate sample size based on the standard deviation and error of the population distribution in order for the Chi-Square estimation to be valid for effective decision-making (Bock, 2004).

Swait and Erdem (2002) applied the chi-square to evaluate the effects of temporal consistency of sales promotions and availability on consumer choice behavior. The importance of consistency of the marketing mix is widely regarded as a key marketing principle. Consistency is commonly understood to apply among marketing mix elements - price, place, product, and promotion - but it also involves a temporal dimension. Marketing messages and marketing mix strategies should achieve some degree of consistency over time. This application focuses on a particular aspect of marketing mix consistency over time in the context of frequently purchased packaged consumer goods. Also, the lack of sales promotion mix consistency is generally harmful to consumer brand evaluations through decreases to average valuations and decreases in scale, leading to a reduction of market share.

Large samples were used for the evaluation, which concluded that sales promotion mix and availability inconsistency have an overall negative impact on consumer's utilities and their choices. Despite its positive main effect on mean utility, price inconsistency is found to decrease utility at high levels of price predictability.

Confidence Intervals

Confidence Intervals denote the probability of a parameter such as the mean of a population lies between certain ranges of values. They allow for estimation on the degree of accuracy an observed value will be true. This makes them a preferred approach as they can provide a hypothesis test and an estimate of an observed value (Denis, 2003).

Confidence Intervals allow the decision-maker to approximate the observed value and its probability to be correct. They can provide a hypothesis test and produce an estimate of the observed value (Becker, 1991). The use of confidence intervals is summarized quite well by Serlin (1993): "… we use them, in the same way an astronomer would use a telescope, to determine if the theoretical prediction, fortified by a good-enough principal belt, obtains …" (p. 352).

A decision-maker, for example, can apply confidence intervals to identify whether the intellect of Alzheimer patients can be improved by the use of a drug. The calculation of a 95% confidence interval can provide evidence that there is or there is not a difference between the IQs (Kirk, 1996).

Two Stage Least Squares (2SLS) Regression Analysis

2SLS is a method of extending regression to cover models which violate ordinary least squares (OLS) regression's assumption of recurrence. Specifically models where the assumption is made on the disturbance term of the dependent variable being correlated with the cause(s) of the independent variable(s). 2SLS can also be used for the same purpose to Extend Path Analysis, except that in path models there may be multiple endogenous variables rather than a single dependent variable. It is an alternative to Maximum Likelihood Estimation in estimating path parameters of non-recursive models with correlated error among the endogenous variables in Structural Equation Modeling. Finally, 2SLS can be used to test selection biases in quasi-experimental studies involving a treatment group and a comparison group in testing hypotheses (Garson, 2004).

Inference, SST, and Decision-Making

During the Persian and Greek war in 450 B.C. Herodotus made the following statement:

> If an important decision is to be made, the Persians, discuss the question when they are drunk and the following day the master of the house...submits their decision for reconsideration when they are sober. If they still approve it, it is adopted; if not, it is abandoned. Conversely, any decision they make when they are sober is reconsidered afterwards when they are drunk.

It might be a strange method, but it reflects one of the various approaches people have used to make decisions including palm readings, looking up at stars, dialing 1-900 psychic friends, telepathy, telekinesis, the aura, crystals, dreams, colors, Feng Shui, numerology, fortune-tellers, … and physiognomy that dates back to Aristotle (Arsham, 2004).

Per Arsham, there are two types of decision making, subjective and objective decision-making. Subjective decisions are based on emotions using the methods mentioned above. Objective decisions are based on facts. Arsham continues to define a good objective decision to be a reflection or a process of critical thinking before action. Decision-makers can use critical thinking to assure the existence, explicitly, and accuracy of assumptions using the following skills (Huit, 1998): (1) To observe is to see and notice somebody/something or an event; (2) To describe is to reveal what was observed; (3) To compare is to examine people, things, or events to evaluate similarities or differences; to form an opinion on something and measure it against something else; (4) To identify is to recognize or establish the identity of someone or something; (5) To associate is to make a logical or causal connection between people or things because they take place together, or because one produces the other; (6) To infer is to arrive at an opinion based on obtainable information or evidence; to arrive at a conclusion; to establish by deduction; conclude by reasoning; (7) To predict is to say in advance that something will happen; to make a guess about the future; (8) To apply is to make a

formal request; to make a law; put into service; make work or employ (something) for a particular purpose or for its inherent or natural purpose; make something pertinent or relevant. These eight skills can be summarized by Statistical Inference, and Explanation (Messina and Messina, 2004).

Statistical Inference

Statistical inference is a comprehension and expression of meaning or significance of experiences, situations, data, events, judgments, conventions, beliefs, rules, procedures, or criteria. Identification of the intended and actual inferential relationships among statements, questions, concepts, descriptions, or other forms of representation intended to express belief, judgment, experiences, reasons, information, or opinion. Assessment of the statements' credibility or other representations which are accounts or descriptions of a person's perception, experience, situation, judgment, belief, or opinion; and to assess the logical strength of the actual or intended inferential relationships among statements, descriptions, questions, or other forms of representation. Identification and security of elements required to draw reasonable conclusions; to form conjectures and hypotheses; to consider relevant information and to educe the consequences flowing from data, statements, principles, evidence, judgments, beliefs, opinions, concepts, descriptions, questions, or other forms of representation.

Conclusion

Regardless of all the debates, it is believed that significance testing still has an important role in making effective decisions. It can be used in combination with the evaluated alternatives for better accuracy. For example, effect sizes should be reported with the same frequency that *P* values are reported and all related descriptive statistics such as the mean and standard deviation. Similarly, confidence intervals, which provide a margin of error around a sample estimate, not only are helpful for assessing the extent of error around the estimate but also reveal the same information that significance testing yields. The use of meta-analysis is also recommended as it integrates results of various research. Enabling researchers to reach conclusions that might have otherwise been excluded by any single research.

Before the banning of SST is proposed, it might be worth taking a look at the scientific approach and its relation to the decision-making process. It is recommended that researchers first make sure the right problem is identified. The right problem should be customer driven and measurable. It should be stated clearly and in a way be understood by everyone involved. The problem should be simplified to be manageable and solvable. Assure that the appropriate population has been identified and observations lead to reliable and valid data. Repeatable collection of data is also recommended. Analyze, understand and interpret the collected data. Test the formulated hypothesis and subsequently reject it or accept it. Use the results to make appropriate decisions. The approach is believed to be a proactive one leading to doing it right the first time versus the debated approaches which are believed to be reactive.

SST will always have its advocates and opponents. Today, many researchers are recommending a combined approach to testing hypothesis. It is strongly recommended that they incorporate additional information that will supplement their findings starting from the inception of the issue for research to the final decision making. The use of these statistical models can be complex. However, interpreting the models correctly, it can provide a systematic approach to effective decision making, minimize guessing, and provide evidence based on facts.

All statistical models appear to include research for facts phase, a hypothesis development phase, analysis of the collected data phase, and concluding alternatives for making a decision. Pending the decision to be made, each of the statistical models can be used collectively or in various combinations. The commonality of all models is their capability to minimize the element of emotion/subjectiveness and maximize the element of fact/objectiveness or evidence-based decision making. Evidence-based decision-making advocates the explicit use of current best evidence in making decisions about situations. The importance of this is increasingly recognized, and with it the need for systematic approaches to evaluate critically the strength of the evidence in support of decision making. The statistical models above, although a little complex, provide this systematic approach.

Statistics play a crucial role in decision-making and have a significant impact on our daily lives. Here are some reasons highlighting the importance of statistical decision-making:

1. Data-driven decision-making: Statistics provide a systematic approach to analyzing data and making informed decisions based on evidence. It allows us to gather, organize, and interpret data to gain insights and identify patterns or trends.
2. Identifying relationships and trends: Statistics help us identify relationships between variables and understand how they interact with each other. This enables us to make predictions and forecasts about future behavior or outcomes.
3. Evaluating claims and conclusions: In a world where data and interpretations are abundant, statistics help us critically assess the quality of analyses presented to us. It allows us to differentiate between reasonable and dubious conclusions, helping us make informed judgments.
4. Problem-solving and risk assessment: Statistics provide tools and techniques for analyzing and solving problems. It helps us assess risks, evaluate options, and make decisions with a better understanding of potential outcomes.
5. Business and finance: Statistics play a crucial role in business decision-making, such as market research, sales forecasting, and performance analysis. It helps businesses measure performance, identify trends, and make strategic decisions.
6. Policy-making and governance: Statistics are essential in government and policy-making, providing insights into areas such as health, education, population, and economics. It helps policymakers make informed decisions and evaluate the impact of policies.
7. Quality control and improvement: Statistics are used in various fields, including manufacturing and healthcare, to measure and control processes, minimize variations, and ensure consistency and quality.
8. Personal finance and investment: Statistics help individuals make informed decisions about personal finance, budgeting, and investment strategies. It enables us to analyze financial data, assess risks, and make sound financial choices.

References

ANOVA Overview (2005). http://www2.chass.ncsu.edu/garson/pa765/glm#glm

Arsham, H. (2004). Leadership decision making. http://home.ubalt.edu/ntsbarsh/opre640/partXIII.htm#rhowtoavoid

Becker, G. (1991). Alternative methods of reporting research results. *American Psychologist*, *46*, 654-655. https://doi.org/10.1037/0003-066X.46.6.654

Chauhan, P. (2023). Lean Six Sigma Master Black Belt at Biocon Biologics. https://www.linkedin.com/pulse/statistics-play-crucial-role-decision-making-have-impact-chauhan/

Cohen, J. (1994). The earth is round (p<.05). *American Psychologist* 49: 997-1003. https://www.apa.org/

Cowles, M. (1989). *Statistics in Psychology: An Historic Perspective.* Erlbaum.

Daniel, D. (2003). Alternatives to Null Hypothesis Significance Testing. *Theory & Science.* http://theoryandscience.icaap.org/content/vol4.1/02_denis.html

Edison, T. (2004). *We don't know a millionth of one percent about anything: Test for Goodness of Fit.* http://web1.caryacademy.org/facultywebs/jeff_killmer/Statistics/section%2013-1.htm

Fischer, R. (1925). *Statistical Method for Research Workers.* Unknown

Franke, H. & Kaul, D. (1978). The Hawthorne experiments: First statistical interpretation. *American Sociological Review*, *43*, 623-643. https://www.apa.org/

Garson, G. (2004). *Two Stage Least Squares (2SLS) Regression Analysis*. http://www2.chass.ncsu.edu/garson/pa765/2sls.htm

Glazer, D. (1999). The Controversy of Significance Testing: Misconceptions and Alternatives. *American Journal of Critical Care, 8*(5wew), https://aacnjournals.org/ajcconline

Huitt, W. (1998). Critical thinking: An overview. http://chiron.valdosta.edu/whuitt/col/cogsys/critthnk.html.

Kalaian, S. (2003). Meta-analysis methods for synthesizing treatment effects in multisite studies: Hierarchical linear modeling perspective. *Practical Assessment, Research & Evaluation, 8(15).* http://PAREonline.net/getvn.asp?v=8&n=15

Kao, S., Aaron, C., and Dellinger, P. (2003). Trials and tribulations: Current challenges in conducting clinical trials. *Chicago. Archives of Surgery, 138*(1), *59-65.*

Kasper, K. (2004). The Credible-Interval Forecast. http://www-md.fsl.noaa.gov/IFPS/mws4/3

Kirk, E. (1996). Practical significance: A concept whose time has come. *Educational and Psychological Measurement*, *56*, 746-759. https://journals.sagepub.com/home/EPM

Koskinen, P. (2004). Decision-making process on field technology for process management. http://herkules.oulu.fi/isbn9514257855/html/index.html

Lefering, R. and Neugebauer, E. (1997). *Problems of randomized controlled trials in surgery.* Proceedings of the International Conference on Nonrandomized Comparative Clinical Studies in Heidelberg, April 10 -11. http://www.symposion.com/nrccs/lefering.htm

Lehmkuhl, D. (1996). Nonparametric statistics: Methods for analyzing data not meeting assumptions required for the application of parametric tests. *JPO*, *8*(3), 105-113. https://www.jpo.go.jp/e/

Levine, D., Berenson, M., and Stephan, D. (1999). *Statistics for Managers Using Microsoft Excel*. 2nd ed. Prentice-Hall.

Matthias E. and Smith**,** D. (1997). Meta analysis: Potentials and promise*. BMJ*. (315), 1533-1537. https://store.nejm.org/

Matthias E., Smith**, D., and** Phillips**, A.** (1997). Meta-analysis: Principles and procedures. *BMJ,* (315), 1533-1537. https://store.nejm.org/

Messina, J. and Messina, C. (2004). What is thinking. http://www.coping.org/write/percept/critical.htm

Morris, S. (1998). Significance tests and confidence intervals for the adverse impact ratio. Illinois Institute of Technology.

Murphy, K. (1998). *A Brief Introduction to Graphical Models and Bayesian Networks*. http://www.ai.mit.edu/~murphyk/Bayes/bayes.html

NIST (nd). https://www.itl.nist.gov/div898/handbook/prc/section1/prc13.htm#:~:text=A%20statistical%20test%20provides%20a,is%20called%20the%20null%20hypothesis

Parkhurst, D. (1985). Interpreting failure to reject a null hypothesis. *Bulletin of the Ecological Society of America, 66*, 301-302. https://esajournals.onlinelibrary.wiley.com/journal/23276096

Parmigiani, G. (2004). Measuring uncertainty in complex decision analysis models. *Statistical Methods in Medical Research, 11,* 513-537. https://www.wolterskluwer.com/en/solutions/ovid/statistical-methods-in-medical-research-15492

Pelosi, K., Sandifer, M., and Sekaran, U. (2001). *Research and evaluation for business.* Wiley.

Serlin, R. C. (1993). Confidence intervals and the scientific method: A case for holms on the range. *Journal of Experimental Education*, *61*, 350-360. https://www.tandfonline.com/toc/vjxe20/current

Simplilearn (2024). Understanding statistical analysis: Techniques and applications. https://www.simplilearn.com/what-is-statistical-analysis-

article#:~:text=Benefits%20of%20Statistical%20Analysis,-Statistical%20analysis%20can&text=It%20can%20help%20you%20make,you%20cut%20the%20wasteful%20expenses.

Statistical Significance (nd). http://en.wikipedia.org/w/wiki.phtml?title=Statistical_significance&oldid=7651792

Swait, J. and Erdem, T. (2002). The effects of temporal consistency of sales promotions and availability on consumer choice behavior. *Chicago. JMR, Journal of Marketing Research, 39*(3), 304-320.

T-test. http://www.socialresearchmethods.net/kb/stat_t.htm

Viswanathan, P. (2004*).* An appreciation of the role of statistical hypotheses in decision making. http://davidmlane.com/hyperstat/logic_hypothesis.html

Yoccuz, N. (1991). Use, overuse, and misuse of significance tests in evolutionary biology and ecology. *Bulletin of the Ecological Society of America, 72*, 106-111. https://esajournals.onlinelibrary.wiley.com/journal/23276096

Zady, M. (2004). *Correlation and simple least squares regression*. http://www.westgard.com/lesson42.htm#linear

Zhang, S. and Sood, S. (2002). "Deep" and "surface" cues: Brand extension evaluations by children and adults. *Gainesville. Journal of Consumer Research, 29*(1), 129-141. https://consumerresearcher.com/

Z-test. http://www.georgetown.edu/departments/psychology/researchmethods/statistics/inferential/ztest.htm

TRANSFORMING HR COURSE DELIVERY IN HIGHER ED: INTEGRATING AI AND EDUCATIONAL TECHNOLOGY INTO THE CLASSROOM EXPERIENCE

Arlene Ramkissoon

Franklin University

Martina Peng

Franklin University

Abstract

The landscape of higher education is experiencing a significant transformation with the increased availability and use of artificial intelligence (AI) and technological tools. This shift can be particularly impactful in business education where the use of these advanced tools can be instrumental in introducing new possibilities for elevated teaching and learning experiences (Riapina, 2024). Utilizing AI and technological tools in the classroom surpasses the instruction of traditional classroom content and methods, and provides an avenue to rethink, reshape, and redesign traditional education systems' approach to teaching and learning (Jereb & Urh, 2024). While most business instructors want to utilize AI and technology-based tools in their classrooms, many do not possess the knowledge of how to integrate technological teaching tools in their instructional strategies to promote student learning (Saeger et al., 2024).

This interactive session will focus on increasing the "AI awareness" and "AI readiness" of educators which will help to better position educators to implement AI and technological tools in classroom settings. This will not only enhance the transfer of knowledge to students but will also help to prepare them for their future careers. This presentation will include examples of different ways AI and technological tools can be incorporated into teaching practices to create a more personalized, interactive, inclusive, and engaging learning environment. Attendees will be given the opportunity to learn about tools which can aid in customizing content and creating presentations which are more effective, visually appealing, more engaging, and more streamlined to appeal to diverse learning styles and generational preferences. They will also gain insights into innovative ways to create assignments using AI in an ethical manner. The use of several AI and technological tools will be demonstrated, and attendees will have the opportunity actively participate in the session. Questions and discussion will be welcomed.

Keywords: AI, artificial intelligence, AI awareness, AI readiness, adult learning, classroom engagement, andragogy

References

Jereb, E. & Urh, M. (2024). The use of artificial intelligence among students in higher education, *Organizacija, 57*(4). 333-345.

Riapina, N. (2024). Teaching AI-enabled business communication in higher education: A practical framework. Business and Professional Communication Quarterly, 87(3), 511-521.

Saeger, D. K. J., Finley, L. R., & Wickam, M. J. (2024). The AI revolution: Awareness of and readiness for AI-based digital tools and technologies in business education. *The Journal of Research In Business Education*, *64*(1).

WATER CONSUMPTION INTENSITY METRICS AND SUSTAINABILITY BENCHMARKING IN THE HOTEL SECTOR: STAKEHOLDER PERSPECTIVES FROM THE DACH REGION

Alexander Schick

TU Wien, Vienna University of Technology, Austria

Alexander Redlein

TU Wien, Vienna University of Technology, Austria

Abstract

Recent non-financial reporting requirements mandate that the European hotel industry implement intensity metrics and benchmarking systems to monitor their environmental impact. This study seeks to develop tailored intensity indicators for measuring water consumption within the hotel industry and to establish a robust framework for sustainable benchmarking clusters. Adopting a qualitative research methodology, the study conducted 16 semi-structured interviews with representatives from four stakeholder groups across Germany, Austria, and Switzerland (DACH region). Content analysis is employed as a data analysis tool. The findings indicate a limited awareness of sustainability reporting practices. Nevertheless, intensity indicators are an effective method for quantifying and comparing water consumption. There, total water withdrawal is defined as the sum of water obtained from external sources and water sourced internally, such as from on-site springs. The results also underscore the importance of including occupant-related variables and floor area data. As a result, the leading indicator revealed is water usage per guest night (WUPGN). Furthermore, operational and physical determinants emerged as significant influences on water consumption. Data segmentation should be based on building size, service level, and occupancy while accounting for external factors such as outsourced services. This study highlights the need for further research to develop a regulatory-compliant reporting framework incorporating additional water-related factors.

Keywords: Hotel Water Consumption, Environmental Benchmarking, Sustainability Indicators.

Introduction

Sustainability has become a pressing concern due to global challenges like climate change, water shortages, and the EU Green Deal policies (Eckert and Kovalevska 2021). Hotels, as resource-intensive properties, are particularly impacted. The operational phase accounts for nearly 90% of total property costs and has a significant environmental impact (Blengini 2009). Therefore, improving operational efficiency presents the greatest opportunity for resource savings (Cunha and Oliveira 2020, Rosselló-Batle *et al.* 2010). On the legislative forefront, current research indicates that sustainable initiatives, standards, and certifications have largely failed to deliver significant impact (Agyeiwaah et al., 2017). Additionally, the EU legislative framework emphasizes the need for "*development of sustainability benchmarks*" (European Commission, 2018, p. 7) and introduces intensity indicators for non-financial reporting within the European Sustainability Reporting Standards (ESRS), such as ESRS E3-4 AR31. To achieve this, developing sustainability indicators to benchmark against peers is crucial (Cheong and Lee, 2021). Despite these developments, the scientific community has yet to fully acknowledge them, prompting new research questions and forming the basis of this study. While water audits have been widely studied in Southern Europe and Asia, Central Europe - especially the DACH region (Germany, Austria, and Switzerland) - remains under-researched. These countries share strong cultural and economic ties, with a combined GDP of approximately $5.35 trillion in 2022 (Horwath HTL 2023). This study aims to gather expert insights on sustainability indicators and clustering techniques for energy use in hotel operations, focusing on the DACH hospitality industry.

Literature Review

Initial efforts in the 1990s introduced environmental management and auditing (Dale and Kluga 1992, Kirk 1995). Early evaluations of environmental efficiency relied on simple benchmarking methods, such as averages, medians, and rankings, focusing primarily on energy consumption (Zmeureanu *et al.* 1994, Santamouris *et al.* 1996) and later expanding to water usage analysis (Chan and Lam 2001, Deng and Burnett 2002). Scholars agree that certain indicators must be developed to measure and benchmark water consumption (Bohdanowicz and Martinac 2007). Regarding the development of intensity metrics and benchmarking practices, the hotel industry lacks a standardized approach to reporting resource consumption. An intensity indicator typically measures resource consumption (input) in relation to a company's service output over a specific time frame (e.g., day, month, or year) and resource unit (e.g., kWh for energy) (Duric and Potočnik Topler 2021). In the hotel industry, inputs commonly refer to resource types (e.g., water usage), while outputs are measured using either general building benchmarks (e.g., per floor area) or industry-specific variables (e.g., number of guests, rooms, or beds) (De Burgos-Jiménez *et al.* 2002). When analyzing previous literature, the water usage per guest night (WUPGN) is found to be dominant (Gabarda-Mallorquí *et al.* 2017, Mclennan *et al.* 2017, Díaz Pérez *et al.* 2019, Cunha and Oliveira 2020, Alhudaithi *et al.* 2022). Interestingly, benchmarking audits vary significantly, ranging from 83 liters (Cobacho et al., 2005) to 839 liters (Charara et al., 2011) per guest night. Moreover, no consistent pattern emerges concerning hotel quality ratings and water consumption, as results differ even within similar geographic and environmental contexts. This variability is evident in audits conducted in Southern Europe. For example, Gössling (2015) examined three high-class countryside hotels, reporting a WUPGN of 317 liters, while Klontza et al. (2016) analyzed eight 3-star hotels, finding a WUPGN of 495 liters—56% higher than Gössling's findings.

Scholars emphasize that hotel water consumption is heavily influenced by operational characteristics and service offerings (Tsai *et al.* 2014). Key factors include the size and type of outlets such as F&B areas, conference spaces, wellness pools, and landscaped grounds (Gössling *et al.* 2012, Gopalakrishnan and Cox 2003, Mclennan *et al.* 2017). For instance, each additional food cover requires 6 liters of water (Bohdanowicz and Martinac, 2007), and extensive garden areas consume around 50% of a hotel's total water for irrigation (Gössling 2001). Notably, water-saving measures, such as low/dual flush toilets, have proven effective, with payback periods typically under three years (Styles et al., 2015). Water consumption also correlates with hotel size and quality. Larger chains are often more resource-efficient, though small chains consume 18% less water than independent hotels, while large chains use 34% more (Deyà Tortella and Tirado, 2011). Climate's impact remains debated. While some found that water consumption is not highly dependent on climate (Shiming and Burnett 2002, Bohdanowicz and Martinac 2007), others postulate a strong dependency (Barberán *et al.* 2013, Mclennan *et al.* 2017).

Research Methodology

This research followed a sequential approach to qualitative data analysis. Initially, a deductive method categorized codes from existing literature aligned with the research aims (Azungah 2018). Missing categories were then derived inductively during data collection for a comprehensive understanding (Mayring 2014). Purposive sampling identified suitable organizations and candidates, yielding 16 interviews, sufficient for data saturation. Respondents were divided into four stakeholder groups (Scientific Community, Hotel Operations / Investors, Sustainability Experts, Policy Makers / Legislators) to gain insights from different perspectives. The interviewees' experience with the research theme ranged from 10 to 35 years, averaging 25 years. Following the collection of interviews, data was paraphrased, generalized, and reduced to central statements, enhancing comparability and detailing differences. The iterative coding process in the data analysis highlighted correlations, differences, and similarities among stakeholder groups, resembling axial coding in Grounded Theory (Strübing 2014).

Findings and Discussion

Interviewees highlight a gap between regulatory frameworks and hotel management practices in environmental reporting, with SMEs - 80% of the DACH hotel industry - having limited awareness of environmental initiatives. While legislative requirements for SMEs are minimal, they increasingly need to provide environmental data for financing or corporate ESG demands. Major hotel chains follow GRI standards, but a standardized reporting approach is lacking. What is more, the ESRS framework lacks hospitality-specific indicators, complicating

benchmarking efforts. Experts stress the need for tailored, measurable hotel metrics, distinct from other real estate categories. For internal benchmarking, at least three years of historical consumption data is recommended to identify trends. Data should be tracked as absolute values or intensity metrics, with interviewees favoring simple initial metrics, improving accuracy over time with technological support. Effective external benchmarking requires valid input-output metrics and transparent peer group clustering.

While water scarcity is a global concern (Gössling *et al.* 2012, Sofroniou and Bishop 2014, Atay and Saladié 2022), interviewees argue that it is less pressing in the DACH hotel industry. Freshwater systems are common, with minimal adoption of greywater recycling or rainwater reuse. Commonly, hotels track their water withdrawal, lacking greywater metering, as sewage fees are typically calculated based on total water usage. Only one respondent reported advanced systems, including greywater metering and rainwater reuse. Water-saving measures such as low-flow showerheads, toilet flow limiters, and pressure reduction were identified as cost-effective solutions. However, interviewees cautioned against compromising guest experience, particularly in luxury hotels. They also emphasized employee training to prevent wasteful practices, such as excessive toilet flushing during cleaning or running water unnecessarily. Currently, most hotels measure only total water usage, preferably by adding internal (e.g., spring on site) and external water sources. Experts suggest integrating greywater metering and monitoring water consumption by hotel outlets (e.g., rooms, restaurants, wellness areas) as a next step, though this requires significant hardware upgrades. Over time, a supply chain perspective should be adopted to measure water usage across all activities, including suppliers and guest journeys. Water consumption per guest night is favored for benchmarking over per square meter, as it better reflects occupancy-related usage. However, room category variations may distort this indicator. These findings align with recent research on hotel water management (Gabarda-Mallorquí *et al.* 2017, Mclennan *et al.* 2017, Díaz Pérez *et al.* 2019, Cunha and Oliveira 2020, Alhudaithi *et al.* 2022). To cover legislative needs, tracking water consumption per revenue unit is also recommended for compliance with the EU Taxonomy (E3-4). Regarding water metrics, the dominating reporting unit is a liter, which corresponds to previous studies analyzing hotel water consumption (Deyà Tortella and Tirado 2011, Becken and McLennan 2017, Ruiz *et al.* 2021).

Regarding reporting frequency, interviewees aligned their views with the practice of annual financial statements. However, the frequency depends on several factors. First, technology and automation are crucial—smart metering or building management systems (BMS) enable more frequent reporting, unlike manual data collection. Second, reporting frequency varies by stakeholder requirements, with financial institutions typically seeking quarterly or annual reports, while hotel operations benefit from more frequent updates. The availability of accurate data, installed hardware, and chosen benchmarking frameworks further influence reporting intervals. As a result, the water consumption of hotel operations should be measured per guest night annually. Depending on data availability, splitting by source and recyclability is preferable. Furthermore, the water intensity based on net revenue is necessary for environmental non-financial reporting.

$$Water\ use\ per\ guest\ night\ (WUGN) = \frac{total\ water\ consumption\ in\ liter}{total\ guest\ nights}\ \text{per year}$$

$$Water\ use\ per\ net\ revenue\ (WUR) = \frac{total\ water\ consumption\ in\ liter}{total\ net\ revenue}\ \text{per year}$$

preferably split by internal and external water and recyclability

Clustering hotel real estate environmental data presents several challenges, particularly in differentiating data points into similar classes. Despite the uniqueness of each hotel, benchmarking remains possible by applying intensity indicators that distinguish hotel characteristics. Following established literature, experts underline that clustering requires differentiating between real estate ("Physical Factors") and operational aspects of hotel management ("Operational Factors"). A third category, "External Factors," captures additional relevant elements. Operational factors are particularly significant. Respondents highlighted the hotel's quality level as a significant factor influencing environmental metrics, aligning with previous research findings (Deyà Tortella and Tirado 2011). In the DACH region, the Hotelstars Union's star-rating system (1 to 5 stars) is preferred. For non-rated hotels, clustering should consider rate levels and local peers. The service scope, number of outlets, and staffing levels - closely linked to hotel quality (Oluseyi *et al.* 2016) - are similarly identified as essential differentiating factors. Furthermore, a hotel's operating concept is a key factor influencing resource consumption. Leisure hotels may further differentiate by

conference or wellness focus, significantly impacting resource use. Water-intensive features like gardens and wellness areas are notable, though detailed tracking (e.g., number of dishwashers or saunas) is impractical due to data limitations. Building utilization must also be considered, requiring occupancy-related data. Interviewees suggested tracking seasonality or operating days, as mountain hotels often operate seasonally (November to April), while urban hotels are typically open year-round. When asked about the importance of chain affiliation, respondents agreed that it has no impact on resource consumption. However, consistent with Iddawala *et al.* (2024), the respondents noted that brand headquarters often provide guidance on collecting environmental data.

Physical factors are related to the real estate's structural attributes and build characteristics. Similar to different academic publications (Gabarda-Mallorquí *et al.* 2017, Tirado *et al.* 2019, Antonova *et al.* 2023), respondents argued that hotel utilization level (i.e., occupancy level) and indoor floor area is the most important physical factors. In the DACH region, some hotels in historic buildings face limitations in hardware upgrades. Opinions on building age varied: while age does not always reflect a hotel's condition due to ongoing maintenance, respondents agreed with Wang (2012) that renovation steps are challenging to measure. Nevertheless, newly built hotels tend to be more efficient, benefiting from advanced technologies like smart meters and efficient HVAC systems. Tracking the construction year or last major refurbishment is recommended to indicate the building's era. However, more detailed hardware factors (e.g., wall insulation, bathtubs, HVAC systems) were excluded due to data limitations and comparability issues.

External factors, the third category, refer to influences unrelated to real estate or hotel operations. The primary factors identified are location and climate. While weather normalization measures have been used in studies comparing different regions (Mclennan *et al.* 2017), interviewees in the DACH region noted minimal climatic differences, deeming climate insignificant for benchmarking. Physical and operational factors also impact benchmarking, as hotels compare only with similar-sized and conceptually aligned properties (e.g., mountain hotels versus city hotels). Weather normalization models remain unreliable due to the lack of a uniform system. Another external factor is guest behavior and origin, although clustering by nationality (e.g., domestic versus international guests) provides limited insight into resource consumption differences. In addition, interviewees emphasized the need to account for outsourced laundry services when calculating environmental indicators. If external laundry energy data is available, it can be included for comparison with hotels operating in-house laundry facilities. Table 3 summarizes expert insights on intensity metrics for non-financial reporting, benchmarking categories, and their influence on water use in the DACH hotel industry.

Conclusions and Further Research

Measuring hotel water consumption is vital for improving efficiency, meeting reporting requirements, and advancing sustainability. Interviews with 16 experts revealed limited awareness of EU taxonomy regulations, particularly among family-owned SMEs, while larger hotel groups faced reporting uncertainties. Experts highlighted the need for metrics like water use per guest night and water per million units of revenue for compliance. Effective benchmarking requires segmenting data by building size, service level, and occupancy, considering external factors like outsourced services. Standardized data collection is critical to avoid inaccuracies that hinder resource management. SMEs face challenges in data analysis and implementation, where environmental training could help (Hu *et al.* 2015). Technological advancements may enhance benchmarking accuracy. The findings underline the need for tailored energy metrics and support future research on hotel sustainability indicators, including other resources like water and waste. Further quantitative research integrating the latest ESRS guidelines and considering guest and staff behavior would significantly advance the field, particularly in Central and Northern Europe. Qualitative studies could explore comparable indicators for other environmental resources, including water, waste, and GHG emissions. This study contributes to the literature by establishing water intensity indicators that support hotel sustainability strategies and inform policy frameworks for operational standards.

Table 1: Influencing Factors on Water Consumption

	Determinants	Expected Sign over Total Water Consumption	Expected Sign over Intensity Water Consumption per Guest Night (WUPGN)
Operational Factors	Quality Level	Significant	Significant
	Number and kind of Outlets	Positive	Positive
	Occupancy Level	Positive	Non-significant
	No. of Guests	Positive	Non-significant
	Seasonality / Opening days	Significant	Non-significant
	Type of board	Significant	Significant
	Operational concept	Significant	Significant
	Number of employees	Positive	Positive
	Chain affiliation	No consensus	No consensus
	Resource-saving measures	Negative	Negative
Physical Factors	Building size (GFA)	Positive	Negative
	Number of rooms / beds	Positive	Negative
	Number of seats in restaurant	Positive	Non-signifcant
	Age of building	No consensus	No consensus
	Historic preservation	No consensus	No consensus
External Factors	Location	No consensus	No consensus
	Climate / Temperature	No consensus	No consensus
	Laundry outsourced	Significant	No consensus
	Guest behaviour	Unexplored	Unexplored

Positive: *resource consumption increases*
Negative: *resource consumption decreases*
Non-significant: *no positive correlation is predicted*
Significant: *a positive correlation is predicted*
No consensus: *no consensus among the interviewees*
Unexplored: *not explored due to complexity*

References

Alhudaithi, M., Arregui, F.J., and Cobacho, R., 2022. Proposal of a Water Consumption Efficiency Indicator for the Hotel Sector. *Water*, 14 (23), 3828.

Antonova, N., Mendoza-Jiménez, J., and Ruiz-Rosa, I., 2023. Determinants of Water Consumption in Hotels: New Insights Obtained through a Case Study. *Water*, 15 (17), 3049.

Atay, I. and Saladié, Ò., 2022. Water Scarcity and Climate Change in Mykonos (Greece): The Perceptions of the Hospitality Stakeholders. *Tourism and Hospitality*, 3 (3), 765–787.

Azungah, T., 2018. Qualitative research: deductive and inductive approaches to data analysis. *Qualitative Research Journal*, 18 (4), 383–400.

Barberán, R., Egea, P., Gracia-de-Rentería, P., and Salvador, M., 2013. Evaluation of water saving measures in hotels: A Spanish case study. *International Journal of Hospitality Management*, 34, 181–191.

Becken, S. and McLennan, C., 2017. Evidence of the water-energy nexus in tourist accommodation. *Journal of Cleaner Production*, 144, 415–425.

Blengini, G.A., 2009. Life cycle of buildings, demolition and recycling potential: A case study in Turin, Italy. *Building and Environment*, 44 (2), 319–330.

Bohdanowicz, P. and Martinac, I., 2007. Determinants and benchmarking of resource consumption in hotels—Case study of Hilton International and Scandic in Europe. *Energy and Buildings*, 39 (1), 82–95.

Chan, W.W. and Lam, J.C., 2001. Environmental costing of sewage discharged by hotels in Hong Kong. *International Journal of Contemporary Hospitality Management*, 13 (5), 218–226.

Cheong, F. and Lee, Y.-H., 2021. Developing an Environmental Management System for Evaluating Green Casino Hotels. *Sustainability*, 13 (14), 7825.

Cunha, F.O. and Oliveira, A.C., 2020. Benchmarking for realistic nZEB hotel buildings. *Journal of Building Engineering*, 30, 1–12.

Dale, J.C. and Kluga, T., 1992. Energy Conservation: More than a Good Idea. *Cornell Hotel and Restaurant Administration Quarterly*, 33 (6), 30–35.

De Burgos-Jiménez, J., Cano-Guillén, C.J., and Céspedes-Lorente, J.J., 2002. Planning and Control of Environmental Performance in Hotels. *Journal of Sustainable Tourism*, 10 (3), 207–221.

Deng, S.-M. and Burnett, J., 2002. Water use in hotels in Hong Kong. *International Journal of Hospitality Management*, 21 (1), 57–66.

Deyà Tortella, B. and Tirado, D., 2011. Hotel water consumption at a seasonal mass tourist destination. The case of the island of Mallorca. *Journal of Environmental Management*, 92 (10), 2568–2579.

Díaz Pérez, F.J., Chinarro, D., Guardiola Mouhaffel, A., Díaz Martín, R., and Pino Otín, M.R., 2019. Comparative study of carbon footprint of energy and water in hotels of Canary Islands regarding mainland Spain. *Environment, Development and Sustainability*, 21 (4), 1763–1780.

Duric, Z. and Potočnik Topler, J., 2021. The Role of Performance and Environmental Sustainability Indicators in Hotel Competitiveness. *Sustainability*, 13 (12), 1–26.

Eckert, E. and Kovalevska, O., 2021. Sustainability in the European Union: Analyzing the Discourse of the European Green Deal. *Journal of Risk and Financial Management*, 14, 1–22.

European Commission, 2018. Action Plan: Financing Sustainable Growth [online]. Available from: https://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:52018DC0097&from=DE [Accessed 24 Nov 2021].

Gabarda-Mallorquí, A., Garcia, X., and Ribas, A., 2017. Mass tourism and water efficiency in the hotel industry: A case study. *International Journal of Hospitality Management*, 61, 82–93.

Gopalakrishnan, C. and Cox, L.J., 2003. Water Consumption by the Visitor Industry: The Case of Hawaii. *International Journal of Water Resources Development*, 19 (1), 29–35.

Gössling, S., 2001. The consequences of tourism for sustainable water use on a tropical island: Zanzibar, Tanzania. *Journal of Environmental Management*, 61 (2), 179–191.

Gössling, S., 2015. New performance indicators for water management in tourism. *Tourism Management*, 46, 233–244.

Gössling, S., Peeters, P., Hall, C.M., Ceron, J.-P., Dubois, G., Lehmann, L.V., and Scott, D., 2012. Tourism and water use: Supply, demand, and security. An international review. *Tourism Management*, 33 (1), 1–15.

Horwath HTL, 2023. DACH Hotel Chains Report 2023 [online]. Available from: https://horwathhtl.com/wp-content/uploads/sites/2/2023/09/DACH-Hotel-Chains-Report-2023.pdf [Accessed 3 Oct 2024].

Hu, A.H., Huang, C.-Y., Chen, C.-F., Kuo, C.-H., and Hsu, C.-W., 2015. Assessing carbon footprint in the life cycle of accommodation services: the case of an international tourist hotel. *International Journal of Sustainable Development & World Ecology*, 22 (4), 313–323.

Iddawala, J., Welengoda, B.M., and Rathnayaka, B.T., 2024. Sustainability practices in the Hospitality Industry: Evidence from Chain Hotels in Kandy. *International Conference on Tourism Research*, 7 (1), 130–139.

Kirk, D., 1995. Environmental management in hotels. *International Journal of Contemporary Hospitality Management*, 7 (6), 3–8.

Klontza, E.E., Kampragkou, E., Ververidis, K., Papadopoulou, M.P., and Lekkas, D.F., 2016. Evaluation of water saving measures for mid-sized tourist lodging units: the case of Samos Island, Greece. *European Journal of Environmental Sciences*, 6 (1), 37–42.

Mayring, P., 2014. *Qualitative content analysis - theoretical foundation, basic procedures and software solution*. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-395173: SSOAR.

Mclennan, C.J., Becken, S., and Stinson, K., 2017. A Water-Use Model For The Tourism Industry In The Asia-Pacific Region: The Impact Of Water-Saving Measures On Water Use. *Journal of Hospitality & Tourism Research*, 41 (6), 746–767.

Oluseyi, P.O., Babatunde, O.M., and Babatunde, O.A., 2016. Assessment of energy consumption and carbon footprint from the hotel sector within Lagos, Nigeria. *Energy and Buildings*, 118, 106–113.

Rosselló-Batle, B., Moià, A., Cladera, A., and Martínez, V., 2010. Energy use, CO2 emissions and waste throughout the life cycle of a sample of hotels in the Balearic Islands. *Energy and Buildings*, 42 (4), 547–558.

Ruiz, M.M.E., Belda-Miquel, S., Hytti, A., and Gil-Saura, I., 2021. Addressing sustainable food management in hotels: proposing a framework and examining hotel groups. *British Food Journal*, 124 (2), 462–492.

Santamouris, M., Balaras, C.A., Dascalaki, E., Argiriou, A., and Gaglia, A., 1996. Energy conservation and retrofitting potential in Hellenic hotels. *Energy and Buildings*, 24 (1), 65–75.

Shiming, D. and Burnett, J., 2002. Energy use and management in hotels in Hong Kong. *International Journal of Hospitality Management*, 21 (4), 371–380.

Sofroniou, A. and Bishop, S., 2014. Water Scarcity in Cyprus: A Review and Call for Integrated Policy. *Water*, 6 (10), 2898–2928.

Strübing, J., 2014. *Grounded Theory: Zur sozialtheoretischen und epistemologischen Fundierung eines pragmatistischen Forschungsstils*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Styles, D., Schoenberger, H., and Galvez-Martos, J.L., 2015. Water management in the European hospitality sector: Best practice, performance benchmarks and improvement potential. *Tourism Management*, 46, 187–202.

Tirado, D., Nilsson, W., Deyà-Tortella, B., and García, C., 2019. Implementation of Water-Saving Measures in Hotels in Mallorca. *Sustainability*, 11 (23), 6880.

Tsai, K.-T., Lin, T.-P., Hwang, R.-L., and Huang, Y.-J., 2014. Carbon dioxide emissions generated by energy consumption of hotels and homestay facilities in Taiwan. *Tourism Management*, 42, 13–21.

Wang, J.C., 2012. A study on the energy performance of hotel buildings in Taiwan. *Energy and Buildings*, 49, 268–275.

Zmeureanu, R.G., Hanna, Z.A., and Fazia, P., 1994. Energy performance of hotels in Ottawa. *ASHRAE Transaction 100*, 314–322.

WHAT BUSINESS SCHOOLS DON'T TEACH: DEATH, DYING, AND GRIEF

Jann Freed

Abstract

Bereavement, the reaction to the loss of someone significant through death, is an emotion that affects productivity, satisfaction, and growth. But there are many kinds of losses for which people grieve and for which leaders are usually not skilled to address. This paper describes the rationale and process for teaching death, dying, and grief in leadership courses. Even though bereavement is prevalent, it is an understudied aspect of leadership development and organizational life. Based on interviews with more than 150 thought leaders, a leadership course was created for both undergraduate and graduate students that includes developing knowledge and skills on this topic. This paper provides practical assignments, shares actual feedback, and explains why directly addressing this topic is critical in developing more compassionate and empathetic leaders needed in this uncertain business environment.

Introduction

The courage to teach is the courage to keep one's heart open in those very moments when the heart is asked to hold more than it is able so that the teacher and students and subject can be woven into the fabric of community that learning, and living, require. Parker Palmer, The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life (p. 11).

The "Great Recession" of 2008 caused the loss of millions of jobs, shuttered hundreds of businesses and companies, and nearly collapsed the banking system. More recently, COVID-19 was devastating to workplaces. The Coronavirus disease was first detected in December 2019 in Wuhan city of the Peoples Republic of China and was declared a pandemic on 12th March 2020. Research by Yamin (2020) stated this pandemic has caused the "most severe economic crisis after the great depression of 1930s" (p. 311).

In 2020, COVID-19 ranked as a leading cause of death. At times, it was "*the* leading cause of death." In addition to physical deaths and the related grief and trauma, the pandemic only magnified all losses. Studies (Walmsley, Rose, and Wei, 2020) have tried to calculate the associated costs and impact of COVID-19 on the economy of the United States. The impact included "mandatory closures and the gradual re-opening process; decline in the workforce due to morbidity, mortality and avoidance behavior; increased demand for health care; decreased demand for public transportation and leisure activities; potential resilience through telework; increased demand for communication services; and increased pent-up demand" (p.1).

Before the pandemic, what was often neglected in the recitation of economic facts and data was the human cost associated with economically tough times (Hazen, 2008). When companies and industries disappear—and the jobs, relationships, and familiar ways of life with them—our human psyche naturally drives us to grieve for these losses. The often-overlooked issue of grief among employees is an emotion that became front and center to our consciousness during the COVID-19 pandemic. While the costs and losses of the pandemic have lessened, grief continues to remain a part of life. Newport (2016) points out the paradox of loss. "There is an unspoken rule that we can speak about the meaning that work provides, but we do not know how to discuss the loss of meaning" (p. 15).

One study of working-age adults revealed that one in five adults is "actively grieving and that, on average, an adult will encounter five bereavements in their life" (Bergeron, 2023, p. 331). Using a bereavement multiplier, Verdery et al. (2020) estimated that for every COVID-19 death, nine immediate family members are affected.

Talking about loss in the workplace is still not the norm even though many aspects of life involve a loss or can trigger a sense of loss. Greenberg (2022) describes how "death is not the only occasion for grief. We can mourn the loss of anything to which we have become attached: a pet, a job, a home, a way of life" (p. 7). Beyond the pandemic, there are all kinds of losses that cause grief and even prolonged grief (Hazen, 2008). These emotions affect workplace productivity, growth, and satisfaction and the opportunities for loss and grief seem to be multiplying because of "war or climate change, polarized and paralyzed politics, and these calamities seem to threaten the foundations of our cultural, political, and natural worlds" (Greenberg, 2022, p. 7).

According to Bento (1994), "In any given year, almost 16 percent of the workforce will experience a personal loss." Bento continued, "There isn't a manager or executive who will not be confronted eventually with death in the workplace," (p. 2). In 2003, The Grief Recovery Institute estimated that "bereavement in the workforce due to multiple types of losses cost the United States economy $75 billion annually, with grief due to loss of a loved one specifically costing $375 billion" (Gilbert and Kelloway, 2021, p. 1).

It is challenging to determine the total impact of grief on organizations, Stein and Winokuer (1989) calculated approximately 2.5 million people die annually in the United States. For each death, they estimated another three lives may be affected. In 1989, that translated into about 7.5 million people per year encounter some form of grief because of death. If half of that number of people are employed, the economic negative influence of grief on the workplace is significant.

While these costs have exponentially increased since this 2003 report, few business and MBA programs address loss, death, and grief as part of their curriculum. Death and dying, loss and grief, pain and suffering, are difficult topics and often considered taboo and many people are uncomfortable discussing. Leadership programs do not usually teach skills to cope with loss and grief. When leaders are not prepared to deal with their own grief, they are less capable to address grief with their direct reports and others.

With knowledge, practice, and courage, we can learn to face our own mortality. Brooks (2025) found a study from 1998 about people who had near-death experiences (NDE). The study revealed that "after a NDE, people became less materialistic and more concerned for others, were less anxious about their own death whenever that time would come, and enjoyed greater self-worth." These are positive leadership attributes that would create a healthy work environment.

Richard Boyatzis, co-author of Resonant Leadership (2005), defines a resonant leader as one who demonstrates hope, compassion, and mindfulness. Boyatzis was asked in 2008 how it is possible to be a resonant leader in times of downsizing, budget cuts. Since the 2008 financial crisis was a decade before the pandemic, we can only imagine how his response in 2025 would be even more dramatic:

> Most people in management and leadership positions are not adding value—in good times and bad. During these economic times, it is becoming more evident how dysfunctional many leaders are. The only way to get out of economic disasters is to innovate and that requires full brain functioning. So the use of hope, mindfulness, and compassion become even more important if people are to work their way out of this mess.
>
> But resonant leaders are always swimming against the current of what most people in leadership and management do. That is why it is so important to teach people the importance of becoming resonant leaders (Freed, 2013, p. 54).

Memento mori is Latin for "remember that you have to die." My research revealed that one of the ways to help people connect with empathy and compassion is to embrace mortality—a reminder that death is inevitable. "The truth is, once you learn how to die, you learn how to live (Albom, 1997, p. 82). To embrace our own mortality, we learn the associated grief and coping mechanisms or lack of.

Method

Starting in 2007, I used what sociologists call a snowball method of sampling (Glaser and Strauss, 1985; Lincoln and Guba, 1985). I sought out thought leaders to explore how to best prepare people to be the kinds of leaders needed in these uncertain times.

The snowball method consists of asking each interviewee to recommend others whom they thought should also be included in this project. One of the benefits of this sampling method is the access to challenging participants to reach. People who might not have agreed to participate were able to be included because they had been referred by someone they know personally. Over the course of 18 years, the list continues to grow because of each interview. By the nature of this method, samples are not random or representative and could result in some bias.

Almost all the interviewees are authors and have the expertise and experience that enable them to teach, coach, and lead others. The people interviewed are a mixture of academicians, executive coaches, and former and current CEOs or senior leaders. Many of the coaches have been identified by the *Wall Street Journal* and *Forbes* as some of the top executive coaches in the country.

Using qualitative analysis, several themes emerged. One surprising theme revealed was how death, dying, loss, and grief should be part of developing effective leaders. This theme was so intriguing that I conducted additional research and developed a component for a leadership course that has been taught to undergraduate and graduate students for several years.

Curriculum for Death, Dying, and Grief

The course is designed on my belief that the most important person to lead is yourself. Therefore, emphasis is placed on enhancing self-awareness because self-knowledge is empowering. Readings, exercises, and activities are focused on helping students discover their strengths and learn about their opportunities for improvement. While the main textbooks have varied over the years, the books that have been mainstays are:

- *Breadcrumb Legacy: How Great Leaders Live a Life Worth Remembering* by Jann Freed (2023) Routledge (Taylor & Francis).
- *Becoming a Resonant Leader* by Annie McKee, Richard Boyatzis, and Frances Johnston (2008) Harvard Business School Publishing.
- *Total Leadership: Be a Better Leader, Have a Richer Life* by Stewart D. Friedman (2014) Harvard Business Review Press.

Death, grief, and loss is only one component of the course, but it is integrated throughout. The three key components for learning about this topic include:

- Read *Tuesdays with Morrie* by Mitch Albom
- Read and watch Steve Jobs' 2005 commencement speech at Stanford
- Watch/read examples of eulogies
- Write their personal eulogy.

Tuesday with Morrie

Since *Tuesdays with Morrie* was published in 1997, it is unknown to most younger students—if not all. I don't explain the premise of the book. My goal is to let the themes unfold during the course. Some of the book is read out loud in class by different student volunteers. Each week students are assigned to read up to a certain page. At the end of each week, the volunteer starts reading from the assigned page. This book is about how to live a life worth remembering.

Commencement Speech

Steve Jobs delivered the commencement speech at Stanford in 2005 titled: "Stay Hungry. Stay Foolish." To date, it has received almost 40 million hits on YouTube, considered one of the most watched commencement speeches. Students watch this speech, and the main themes are discussed such as these quotations:

- Stay hungry, stay foolish.
- Your time is limited, so don't waste it living someone else's life.
- You can't connect the dots looking forward; you can only connect them looking backward.
- Don't let the noise of others' opinions drown out your own inner voice.

Students read this newsletter from Sahil Bloom "7 Lessons from Steve Jobs' Commencement Speech."

Eulogy

Grief, death, and dying are a part of life and we spend a great deal of our life at work. Understanding grief is an important leadership skill as industries are dying, jobs are being eliminated, and the "way things have always been done" is changing. Embracing our own mortality is a key in overcoming our fears and living life to the fullest.

This assignment is due during the last full week of the course. We discuss the difference between obituary (doing) and eulogy (being). There are only two guidelines for this assignment. The eulogy is mandatory, but it will not be graded. And it will be shared orally with classmates. There is no right or wrong way to complete this assignment. There is no word count. It can be written as if the student dies during the year or as if s/he lives to be 85 or beyond. The eulogy can be written in first person or in third person. Students are encouraged to talk with a trusted confidant about this assignment. Examples are provided.

Conclusions

As stated in the Introduction, content about grief and the skills needed to address it are not typically taught in leadership programs. Based on my research and experience, they should be taught because they are critical life skills. Our society tends to be in denial about death—even though "deaths" (any kind of attachment that is lost) are inevitable. The implication for leaders is this: If we don't understand our own grief and coping mechanisms to face these topics, it is hard to help others when the time arrives.

In *Finding Meaning: The Sixth Stage of Grief* (2020), David Kessler, one of the authorities on grief, says:

> Each person's grief is as unique as their fingerprint. But what everyone has in common is that no matter how they grieve, they share a need for their grief to be witnessed. That doesn't mean needing someone to try to lessen it or reframe it for them. The need is for someone to be fully present to the magnitude of their loss without trying to point out the silver lining (Kessler, 2019).

Organizations typically have policies allowing employees "a few days to deal with the death of loved ones, according to a sliding scale of love: so many days for a spouse, a child, a parent, a friend (Bento, 1994, p. 1). Policies usually don't cover other kinds of losses such as pets. But quantifying grief doesn't make it better and can make it feel worse because grief doesn't have a timeline or finish life. Organizations focus on productivity and efficiency and grief is problematic because it disrupts this focus. Bergeron (2023) concludes, "More than any other setting, the workplace exercises significant pressure on grieving individuals to be silent about and hide their grief" (p. 331).

Since few leaders understand or have training to quip them to deal with loss and grief or other life events that manifest grief responses—serious illness, divorce, or the death of a spouse, partner, friend, or even pet—it is essential to learn how to transform grief into compassion and empathy. Interestingly, loss is even associated with many positive life events that are celebratory such as promotions and weddings. These positive events are often accompanied by a grieving process for the way life used to be and how relationships change. Future leaders need to learn in college how to be fully present without feeling as if they need to provide answers or advice.

Being fully present for employees who are experiencing grief requires courage to listen to what is being shared or not shared. Leaders need to be comfortable with silence, but students are not really taught to listen. "A 2015 study showed that while 78% of accredited undergraduate business schools list 'presenting' as a learning goal, only 11% identified 'listening.' (Abrahams and Grosberg, 2021).

When the eulogy assignment is briefly explained at the beginning of the course, students are apprehensive and confused. They don't understand why death, grief, and loss are topics included in a leadership course. But by the end of the course, they can connect the dots. After about 14 weeks, a safe environment has been created for them to be vulnerable. The various assignments, readings, and discussions enable them develop compassion and empathy—important skills for work and for life.

I started teaching about death, dying, and loss in 2007—years before David Brooks published *The Road to Character* (2015). In this book, Brooks describes how important it is to know the difference between the résumé virtues and the eulogy virtues. "The résumé virtues are the ones you list on your résumé, the skills that you bring to the job market and that contribute to external success. The eulogy virtues are deeper. They're the virtues that get talked about at your funeral, the ones that exist at the core of your being — whether you are kind, brave, honest or faithful; what kind of relationships you formed" (p. xi).

While most of us would say that the eulogy virtues are more important than the résumé virtues, Brooks admits that he spent more time thinking about the resume virtues than the eulogy virtues. "Our education system is certainly oriented around the résumé virtues more than the eulogy ones," (p. xi). Since business schools teach how to develop a career, most students learn what it takes, but are less clear on how to develop a character of integrity and high moral standing.

Student feedback and reactions have been powerful and memorable—particularly regarding writing and sharing their own eulogy. Compassion, empathy, and listening are skills demonstrated. The eulogies have been creative. We have laughed and we have cried. Some have written their eulogies as poems or sang them as songs. There has never been an instance of disrespect or inappropriate humor. In fact, most of the time you could hear a "pin drop" because of how intensely students were listening.

I have used these assignments with students aged 20-40 and the feedback is consistent. They tell me it was the course that changed their lives, and this course has changed my life. My mantra during the course is this: If your eulogy is how you want to be remembered, then you need to start living your life like that right now. Once you have clarity on that, the earlier you know it—the better.

References

Abrahams, R. & Groysberg, B. (December 21, 2021). How to become a better listener. *Harvard Business Review,* https://hbr.org/2021/12/how-to-become-a-better listener

Albom, M. (1997). *Tuesdays with Morrie: An old man, a young man and life's greatest lesson.* New York: Doubleday.

Bento, R.F. (1994), When the show must go on: Disenfranchised grief in organizations", *Journal of Managerial Psychology*, *9*(6), pp. 35-44. https://doi.org/10.1108/02683949410070197

Bergeron, D. M. (2023). Monday mourning: A call for the study of bereavement in the workplace. *Journal of Management Inquiry, 32*(4), 331-337. https://doi.org/10.1177/10564926231180416

Bloom, S. (October 5, 2022). 7 Lessons from Steve Jobs' commencement speech. *Curiosity Chronicle.* https://www.sahilbloom.com/newsletter/7-lessons-from-steve-jobs-commencement-speech

Brooks, D. (2015). *The road to character.* New York: Random House.

Brooks, A. (January 9, 2025). You're going to die. That's a good thing. *The Atlantic,* *https://www.theatlantic.com/ideas/archive/2025/01/what-tolstoy-knew-about-good-death/681242/*

Freed, J. (2013). *Leading with wisdom: Sage advice from 100 experts.* Alexandria, Virginia: ATD.

Freed, J. (2023). *Breadcrumb legacy: How great leaders live a life worth remembering.* Routledge: New York, New York.

Friedman, S. D. (2014). *Total leadership: Be a better leader, have a richer life* Boston: Harvard Business Review Press.

Gilbert, S. L., & Kelloway, E. K. (2021). Grief in the workplace. In T. Wall, C. Cooper, & P. Brough (Eds.), *The SAGE handbook of organisational wellbeing*. SAGE Publishing (pp. 282- 300).

Glaser, B. G., and A. I. Strauss (1967). *The Discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine.

Greenberg, G. (May 8, 2022). In grief is how we live." *The New York Times.*

Hazen, M. A. (2008). Grief and the workplace. *Academy of Management Perspectives*, 22(3), 78–86. https://doi.org/10.5465/amp.2008.34587996

James, J. W. & Friedman R. (2003). *The "hidden" annual costs of grief in America's workplace*. The Grief Recovery Institute Educational Foundation Inc.

Kessler, D. (2020). *Finding meaning: The sixth stage of grief*. New York: Scribner.

Kessler, D. (November 15, 2019). Our experience of grief is unique as a fingerprint. *Literary Hub*. https://lithub.com/our-experience-of-grief-is-unique-as-a-fingerprint/

Lincoln, Y. S., and E. G. Guba (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage Publications.

McKee, A., Boyatzis, R., & Johnston, F. (2008). *Becoming a resonant leader.* Boston: Harvard Business School Publishing.

Newport, C. (2016). *Deep work: Rules for focused success in a distracted world.* New York: Grand Central Publishing.

Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life.* San Francisco: CA: Jossey-Bass.

Stein, A. J. & Winokuer, H. R. "Monday mourning: Managing employee grief," in Doka, K. J. (Ed.), pp. 91-102. *Disenfranchised grief: Recognizing hidden sorrow.* (1989). Lexington Books: Lanham, MD.

Verdery, A. M., Smith-Greenaway, E. Margolis, R. & Daw, J. (2020). Tracking the reach of COVID-19 kin loss with a bereavement multiplier applied to the United States. *Proceedings of the National Academy of Sciences, 117*(30), 17695-17701, https://doi.org/10.1073/pnas.2007476117

Walmsley, T., Rose, A. & Wei, D. The impacts of the coronavirus on the economy of the United States. *EconDisCliCha* 5, 1–52 (2021). https://doi.org/10.1007/s41885-020-00080-1

Yamin, M. Counting the cost of COVID-19. *Int. j. inf. tecnol.* 12, 311–317 (2020). https://doi.org/10.1007/s41870-020-00466-0

WU-WEI (無為) AND AI

Maria Lai-Ling Lam

LCC International University

Abstract

Wu-Wei is an Eastern philosophy that emphasizes seeking wisdom through intuition rather than intellect. It represents an ideal moral and spiritual state of being. The rapid development of AI could hinder potential leaders ability to fully engage with the unique nuances of their local contexts and practice *wu-wei* synergy. Without a critical engagement with AI, these leaders may struggle to develop their judgment skills in situations that are ambiguous, uncertain, and surprising. Management educators must recognize the importance of personhood and incorporate practices like meditation and mindfulness in an AI-driven world. This approach will help guide future leaders to unlearn and let go of the knowledge they acquire from AI, ultimately steering them toward the ideal state of *wu-wei.*

Introduction

Having taught in the United States and Hong Kong business programs for more than thirty years, it has been part of my life's work to develop students' character and relate their beings with their doings by bringing an Eastern philosophy of wisdom (i.e., "emptying out") into our westernized curriculum created by Western philosophies of wisdom (i.e., "attain ultimate fullness"). In today's AI-driven world, leaders need the wisdom and know-how to make informed judgments in situations characterized by ambiguity, surprise, and conflicting values—circumstances that Artificial Intelligence (AI) cannot resolve. The Eastern philosophy of wisdom embodies "a cultivated humility, meekness for demeanor, and openness of mind that is distinct from aggressive and relentless pursuit, acquisition, and exploitation of knowledge…Wisdom is not about having more information or constructing irrefutable propositions. True wisdom exceeds those quantifiable elements. It takes its cue from vagueness and ambiguity" (Chia & Holt, 2007).

Shotter and Tsoukas (2014) reviewed the literature on leaders' judgment in such circumstances and found that these leaders are deeply engaged in the situation over an extended period. They develop "spontaneous actions that involve emotional attunement to the particular case, enabling discerning perception." These wise leaders refine their ability to intuitively grasp the essential elements of a situation and create possible responses that aim for the common good, using their values, intuition, intellect, emotions, and reasoning in the process. Their wisdom cannot be replicated by the vast amounts of data and information provided by AI. Instead, these leaders are practitioners embedded in Eastern philosophy of wisdom known as *wu-wei* (無為) and strive for synergy (Vaill, 1989).

Artificial intelligence (AI) is driving profound and systematic changes; it is simply, not repeating the localized changes created by the Industrial Revolution. The impacts of AI on our current social, economic, political, legal, educational, and health systems are global and come with abundant unanticipated consequences that are fueled by the ever-expanding human, technological, and financial resources dedicated to AI technology. The new AI social order can be described as data capitalism and data colonialism (Couldry & Mejias, 2019; Mohamed et al., 2020). Domination and exploitation are becoming increasingly abstract and distant from many people's lives. Achille Mbembe, a prominent political theorist and historian, described the 21st-century colonization as "about extraction, capture, the cult of data, the commodification of human capacity for thought and the dismissal of critical reason in favor of programming" (Bangstad & Nilsen, 2019). He warns us to recover our human ability to think. He states, "*There is a mass need to recover the ability to think. For me, knowledge is on the verge of being reduced to a mere metaphor. As a result, we are witnessing a significant impoverishment of thought almost everywhere."* Will many leaders be programmed and miss the opportunities of being fully immersed in the particularities of the situation and developing capacities to make wise judgment in an AI-driven world with many biases, uncertainties, and ambiguities? How would management educators practice *wu-wei* to enhance leadership development capacities in the AI-driven world?

Wu-wei represents an ideal moral and spiritual state of being where the practitioner attains perfect skills to cope with various situations and perform effortlessly and spontaneously, as valued in traditional Chinese culture (Barrett, 2011). "*Wu-wei* embodies the perfection of a unique and ultimate skill: the skill of becoming a fully realized human being and embodying the Way in all actions" (Slingerland, 2003, p. 9). It is a phenomenology of individuals who perform effortlessly and spontaneously while acting on knowledge aligned with the *Way* and *De* (Chia & Holt, 2007; Slingerland, 2000). This state of *wu-wei* is also described as "flow" in Csikszentmihalyi's (1990) empirical studies on optimal professional experience. "The *wu-wei* attitudes of seeking synergy, patience, acceptance of emergent events, and embedding oneself in situations rather than abstracting oneself from them are essential for effective performance" (Vaill, 1989, p. 188). How can *wu-wei* enable us to survive with and adapt to rapidly evolving AI technology and develop a culture that respects and advances the dignity and well-being of humans and the non-human animals with whom we share the world (Tasioulas, 2022, p. 240)?

In this analysis, I build on my extensive literature reviews about *wu-wei*, AI systems, and reflections on my thirty years in higher education. This article proceeds with four sections. The first section describes the philosophy of *wu-wei* and *wu-wei* management as a metaphor. The second section demystifies AI. The third section describes the insights from *wu-wei* in this AI-driven world. The fourth section recommends *wu-wei* practices that have more leaders who make wise judgements for one world and our humanity in our management education.

Wu-Wei **Philosophy and** ***Wu-Wei*** **Management as a Metaphor**

The concept of *wu-wei* is somewhat ineffable. Barrett (2011, p.681) describes *wu-wei* as "a special kind of action and a way of life based on the regular practice of that kind of action: an effortless way of comporting oneself in the world with supreme harmony or efficacy." *Wu-wei* can be characterized by four key elements: (1) fine-tuned responsiveness and skill, (2) non-deliberative spontaneity, (3) effortlessness, and (4) enjoyment.

The idea of *wu-wei* wisdom is a form of learned ignorance and is one unlearning traditional Eastern Wisdom. It is attained by "emptying out" or "unlearning" (Chia and Holt, 2007). *Wu-wei* represents an ideal moral and spiritual state of being, where one attains perfect skills to cope with various situations and perform effortlessly and spontaneously, as valued in traditional Chinese culture (Barrett, 2011). "*Wu-wei* embodies the perfection of a unique and ultimate skill: the skill of becoming a fully realized human being and embodying the *Way* in all actions" (Slingerland, 2003, p.9). It is a phenomenology of individuals who perform effortlessly and spontaneously, acting on knowledge aligned with the Way and De (Chia & Holt, 2007; Slingerland, 2000). This state of *wu-wei* is also described as "flow" in Csikszentmihalyi's (1990) empirical studies on optimal professional experience. Peter B. Vaill, a well-known organization development theorist (Dent, 2020), said, "The *wu-wei* attitudes of seeking synergy, patience, acceptance of emergent events, and embedding oneself into situations rather than abstracting oneself from them are essential for effective performance" (Vaill, 1989, p.188).

Wu-wei entails an ideal state characterized by skillfulness and moral integrity. It embodies a sense of effortless action—either acting or not acting. This idea is linked to existing literature on mindfulness, the flow experience, neuroscience, and spiritual growth (Barett, 2011; Chia and Holt, 2007; Csikszentmihalyi, 1990; Slingerland, 2000). Yearley (1996) notes that perfectly executed and skillful activities in *wu-wei* correspond to the traits of flow described by Csikszentmihalyi and his colleagues (Nakamura & Csikszentmihalyi, 2002). These traits relate to what is considered an optimal experience by Nakamura and Csikszentmihalyi (2002) and include:

1. Intense and focused concentration on the task at hand
2. Merging of action and awareness
3. Loss of reflective self-consciousness
4. Sense of control, or more accurately, a complete absence of anxiety
5. Distorted sense of time
6. An experience of the activity as intrinsically rewarding (autotelic experience).

The flow experience ultimately depends on the individual's perspective, shaped by their interests, abilities, and focus of attention. The subjective quality of this flow experience plays a significant role in determining the psychological well-being of the individual. To embark on this journey toward *wu-wei* wisdom, we must purify our hearts, refine our

experiences, empty our thoughts, and immerse ourselves in the reality around us. Unlearning our previous successful skills or knowledge in the new context is ironically the path toward genuine wisdom and insight.

Wu-wei is an ideal harmonious state, embodying the paradox of virtue, which revolves around the fact that virtue can only be acquired by someone who is not consciously trying to acquire it. Slingerland (2000, p.300) cites Jean-Francois Billeter's definition of *wu-wei* as a state of "perfect knowledge of the reality of the situation, perfect efficaciousness, and the realization of a perfect economy of energy." *Wu-wei* can refer to the state of the mind of the actor. It does not refer to observable actions themselves. It is about the phenomenological state of the doer and the spiritual state of the doer at the moment of action. *Wu-wei* represents the perfection of a unique and ultimate skill: the skill of becoming a fully realized human being and embodying the *Way* in all actions. Thus, *wu-wei* should be seen as a spiritual ideal when a being is harmonized with the objective and normal order of the cosmos. Thus, Slingerland (2000, p.300) describes that for a person in *wu-wei*:

> *proper conduct follows as instantly and spontaneously as the nose responds to a bad smell, with the same unconscious ease and joy with which the body moves to the rhythm of a song. This state of harmony integrates complex cognitive and somatic elements, involving the body, emotions, and mind. Unlike instinctual or habitual actions, wu-wei requires a high degree of concentration and allows for considerable flexibility of response.*

Wu-wei management serves as a metaphor for "a kind of non-principled, non-justified, unthought-out, and non-calculated action" (Vaill, 1989, p.182). It allows our consciousness to operate as an integral part of our circumstances (Vaill, 1989, p.183). *Wu-wei* practitioners or doers seek to "maintain the unity of time, the unity of thought and action, and the unity of self and environment" (Vaill, 1989, p.186). The *wu-wei* attitude emphasizes qualities essential for effective performance, including the search for synergy, patience, acceptance of emergent events, and the tendency to immerse oneself in a situation rather than abstracting from it (Vaill, 1989, p.188). Actions taken in a *wu-wei* state appear effortless and instinctive. Indeed, individuals act when conditions are appropriate and without delay between thought and action; thought and action occur simultaneously. They calmly execute the purposes of their work with full presence in the existing context. This effortless and instinctive action is defined as *wu-wei*, characterized by a state of being unselfconscious and at ease.

Practice is defined as "the conscious ability to produce fairly consistent intended results across a range of circumstances. To do this well, one must grow and change to meet the evolving situations in which one exists" (Vaill, 2020). Through the practice of *wu-wei* management, business professionals learn to flow with the system and make appropriate changes. This process involves examining their values regarding relationships with themselves, others, and the external environment. Through learning, they come to understand that their best choices in specific situations are temporal. They develop their learning methods and determine what to focus on to consistently deliver results in diverse circumstances and strive to live fully as human beings.

To practice *wu-wei*, we must develop the necessary skills. Our effortless actions arise from a wealth of embodied knowledge, a clear mind, and careful reflection on how to align our actions with our circumstances and self-understanding. The pursuit of *wu-wei* also transforms our being and nurtures our growth as we learn to unlearn and let go throughout this journey. Ultimately, *wu-wei* represents an ideal spiritual state, characterized by spontaneous mastery that aligns with both our situations and the Way of the universe, accompanied by love.

Professionals enhance their expertise by immersing themselves in perceived realities, developing *wu-wei* actions that align with their deep inner consciousness and understanding of context. When transferring their learning to new situations, they must reflect on their cherished values and adapt accordingly. They should recognize their growth and create meaning from the changes they undergo while delivering results across various circumstances. The *wu-wei* actions they take unify thought and action, with their thought being closely linked to individual moral consciousness. This alignment allows them to find deeper meaning in both the results they seek and the changes they make, both externally and internally.

Ultimately, the unity of self and environment within *wu-wei* is supported by the development of spiritual and moral character. Those who practice *wu-wei* attract people through greater values; they appear relaxed and deeply

absorbed in meaningful pursuits. As noted by Slingerland (2014, p.192), "true *wu-wei* is a sign of genuine commitment to the activity and its larger framework."

Demystify Artificial Intelligence (AI)

AI is better understood as a social-technical ecosystem (Dignum, 2022). AI is a software system designed by humans to achieve some complex goals, such as being efficient and personalized education with integrity. AI is capable of making decisions based on a large set of data collected about a specific knowledge environment. This means that it can have the properties of autonomy (i.e., able to reach some specific goal without external control), adaptability (i.e., able to sense its environment and update its behavior to changes in environment), and interactivity (i.e., acts in a physical or digital dimension where people and other systems coexist) (Dignum, 2021). Those who have power can influence "which decisions or actions are being automated, which data, knowledge and resources are used to learn from, and how interactions between those that decide and those that are impacted are defined and maintained" (Dignum, 2022). Our knowledge produced by AI is deeply ingrained in our legacy of post-colonialism (Couldry & Mejias, 2019; Tacheva & Ramasubramanian, 2023). AI systems deepen our existing biases and inequalities (Lam, 2024).

Bommasani et al. (2022) remind us of the unknown emerging properties of the AI foundation model, which requires deep interdisciplinary collaboration. Specific applications of these foundation models will inherit the defects of the foundation models and also incentivize harmonization. They said,

> *Despite the impending widespread deployment of foundation models, we currently lack a clear understanding of how they work, when they fail, and what they are even capable of due to their emergent properties.*

AI is trained on pre-chosen sets of data for specified tasks. They are incapable of handling situations not captured by their pre-trained dataset. Sheikh et al. (2023) said, "AI is associated with a distinct techno-economic paradigm characterized by continuous change to products and services, a largely hidden vertical structure of hardware and software, and the potential for technology to act autonomously" (p. 96). Using statistical optimization to find the patterns in the data may result in missing many interesting phenomena and alternatives, as they are not described by the bell curve in the statistical analysis. Data used to train the foundation model often inherits the historical and systemic biases of human produced data, which can then be transferred from the foundation to the application models and further marginalize many minority groups. The Center for Research on Foundation Models remains dissatisfied with developers' data disclosure behavior (Bommasani et al., 2024). The explainability of the current foundational model and an assessment of the quality of data in the training of the foundation model are both still lacking. These foundation models can and do exacerbate social inequalities. They need countless investments in training the data and refining the foundation model to correct mistakes such as historical biases and hallucinations. However, without effective AI governance and regulation, it may exacerbate historical income inequality and poverty (Arnold, 2024; Cazzaniga et al., 2024; European Union, 2024; Gratton, 2024; IBM, 2023; Maslej et al., 2024; UNESCO, 2023; WHO, 2023).

The overarching ethical principle in the AI system is to adopt preference-based utilitarianism. AI systems are designed to maximize the fulfillment of human preferences that are shaped by human experience and cannot be easily known and quantified (Russell, 2022; Tasioulas, 2022). Societal ethics are unfortunately reduced to precision and an optimization of human preferences in the AI system. AI generally focuses on the economics of scale, economic prosperity, and maximizing select notions of expected utility. The value of optimization of human preference may deny core basic human values such as mercy and dignity (Tasioulas, 2022).

Why do so many people question the use of AI in legal cases, even when its efficiency and outcomes have been proven? Why do people still prefer to be heard by professional judges, even when the odds of winning are slim? Why do patients often feel more angry when they receive letters of apology generated by AI? The answer lies in our deep-rooted need for genuine human connections, especially in moments of judgment, vulnerability, and emotional significance. Despite being prone to cognitive biases such as anchoring, representativeness, framing, egocentrism, and hindsight bias, we still value the presence of sincerity, empathy, moral reasoning, human intuition, dignity, respect,

and fairness. We need to contemplate how our focus on efficiency and economies of scale created by AI destroys our precious process of human learning, judgment, and essential human qualities.

AI is changing our understanding of the good life, the virtues of patience, thinking, knowledge, consciousness, emotions, society, good and evil, and the ultimate purposes of the universe. AI can be deployed on a large scale and at a speedy rate without understanding the impact of AI on current social norms and human values (Hinton, 2023a, 2023b; Russell, 2019, 2022, 2024). Many unknown emergent patterns will be generated from large language models while people keep fine-tuning preexisting data sets to increase their accuracy and fairness (Woldridge, 2023; Zewe, 2022). AI can escape human control and become an unaccountable and dangerous machine (Davies, 2024). Wiener (1960) has already warned us that humans can easily over-rely on automated machines to make decisions for themselves without questioning the purpose and potential negative consequences of using these automated machines. He observed,

> *Though machines are theoretically subject to human criticism, such criticism may be ineffective until long after it is relevant. To be effective in warding off disastrous consequences, our understanding of our man-made machines should in general develop at the same rate with the performance of the machine. By the very slowness of our human actions, our effective control of the machines may be nullified. By the time we are able to react to the information conveyed by our senses and stop the car we are driving, it may already have run head on into a wall (p. 1355).*

When AI issues are treated as primarily technical issues solved by experts, we may ignore our own character development and other people's well-being. When corporate leaders are anxious to seek opportunities created by AI and want to get ahead of their competition, they have shown a willingness to take higher risks to speed up and scale their deployment of AI, and this haste may end up harming human beings and society in the long run. The more I learn about AI, the more uncertain and perplexed I become. David Huth, a professor of visual communication and media arts at Houghton University, said, *"the most sensible way of approaching this event is to engage AI actively and intentionally—and to do so as if it is a kind of mind. A crude, alien mind—rapidly maturing in its mentality faster than I can anticipate. When I consider other approaches, they eventually come off as inept and off-putting category errors*" (Reusser & Hougton University Faculty, 2024, p. 83). AI is regarded as an event that is happening to us. We need to think deeply about how we can have a broader engagement of people in the development and deployment of AI in different sectors, such that AI will not "amplify and reproduce the forms of power it has been deployed to optimize" (Crawford, 2021, p. 224). Tasioulas (2022) concluded that "our focus must be properly integrating AI technology into a culture that respects and advances the dignity and well-being of humans, and the nonhuman animals with whom we share the world, rather than on the highly speculative endeavor of integrating the dignity of intelligent machines into our existing ethical framework" (p. 240). How do we preserve our genuine human interactions and critically engage in the middle of this AI event and the changes toward automation that the event forces on our work environment?

Can humans cede basic levels of thinking and skill-acquisition processes to AI and instead focus on higher-order thinking skills based on AI outputs? The concern is that when basic skills are ceded to machines, humans lose the opportunity to develop higher-order skills through scaffolding. For example, Corbin et al., (2025) present six pedagogical reasons to be aware of the negative consequences of using GenAI grading and tutoring systems, with particular attention given to the area of philosophy: "(1) Limitations on teacher efficacy; (2) increased student alienation; (3) the undermining of educators' duty of care; (4) the outsourcing of *core* teaching tasks; (5) questions regarding the accuracy and utility of GenAI graders; and (6) the risk of implementing GenAI as a misguided solution to real problems in education" (p.1).

There is an illusion of mastery among low-skilled professionals (Dell'Acqua et al., 2023). They may rely on AI and not adequately understand relevant functions or be equipped with the relevant knowledge when the AI tool is taken away or does not perform as expected (Felten et al., 2023). They will also lose opportunities to learn how to judge and mature in their learning. They become consumers of mass information and also lose opportunities to learn tasks that are now automated. When tasks are delegated to AI, workers may lose their ability to understand the holistic aspect of the tasks and this will reduce their productivity. Thus, automation of a subset of tasks may reduce productivity in the remaining tasks. This is called the losing economics of scope (Acemoglu, 2024). When the economics of scope is important, human beings cannot acquire knowledge from performing certain automated tasks

and transfer their knowledge to another task to increase productivity. AI may add additional costs when the economics of scope are important for productivity. AI could result in many superficial users over-relying on machines and accepting AI solutions without their own reasoning or questioning. The excessive automation caused by current AI development destroys many laborers' lives and reduces the chances of shared prosperity among poor people (Klinova, 2024). Acemoglu and Restrepo (2022) reminded us that automation created by AI has failed to create compensatory labor demand in the economy and has resulted in poor labor returns. Workplace monitoring technologies only speed up and intensify the creation of excessively punitive environments and the shifting of risks from employers to employees (KIinova, 2024).

The current data extraction and accumulation of data as capital only leads people to abstract from the material conditions of these AI devices while extracting data and resources from those who are the least able to resist (Crawford, 2021). Potential harms of AI include but are not limited to privacy violations, unfair competition, and behavior manipulation (Acemoglu, 2024). Companies with more data than competitors violate customers' privacy by processing and using their data for their own advantage; they also exploit biases and vulnerabilities that consumers do not recognize. The market will be further distorted for the interests of those AI higher achievers. Given the commercial ambitions about investment in AI and the AI national race, the public may defer ethically and politically contentious AI issues to technocratic and government elites. The pending AI national race will rationalize and weaponize national surveillance on people's daily lives. The lives of the marginalized will be dominated and exploited more through the provision of data in the name of data for national security.

The gain of capital is much higher than the gain of labor wages given by AI as an intensive capital investment (Acemoglu, 2023; Acemoglu & Johnson, 2023, 2024; Acemoglu & Restrepo, 2022). Most of the benefits of growth will favor those at the top, resulting in wider income inequality in most countries. Many AI labor-saving devices, developed by a few AI "superstar companies," will result in lower actual GDP of emerging and low-income countries (Korinek et al., 2021). AI is predicted to have an unequal negative disruptive effect on people in different geographical and industry areas (Cazzaniga et al., 2024; Crawford, 2021; Goldman Sachs, 2024a, 2024b; McKinsey & Co., 2023). Emerging and low-income countries cannot rely on their labor-intensive industries and attract less foreign investment for market development. Their actual GDP is predicted to decline as many labor-saving devices will be exported from these developed countries to these emerging and low-income countries at much lower prices and lower marginal costs. Human suffering in these emerging and low-income countries will remain very remote from these leaders in developed countries, leaders whose enabling of AI workflows may contribute to their suffering in the first place.

In summary, **AI erodes human capital.** AI may increase the productivity of low-skilled professionals in select ways as they can, in certain fields, quickly perform up to high-skilled professionals (Dell'Acqua et al., 2023). However, they may not enjoy higher income as the price of the products and services provided will be lowered, given the increasing return of capital with similar or reduced labor. Furthermore, more so-called "AI + human operations" will still require some human presence but will allow companies to hire cheaper, low-skilled professionals to do the tasks, while more expensive and aging experienced professionals will be replaced by these kinds of "AI + human operations." Consequently, AI excels at mediocrity and aggregation, and many strategies suggested by AI systems and applications push to a common denominator without much creativity or breakthrough. When there is no data, there is no problem.

Considering the current economic and time pressures in many professional fields, along with the improving performance of AI, it is essential for us to be fully engaged in AI and critically evaluate the essential human qualities that must be preserved or recovered in our current process when the short-term outcome is exaggerated while the long-term consequences on human beings are underestimated. The potential dangers of AI, including its role in exacerbating poverty, are often obscured when contemporary computing methods are presented as value-neutral. AI is limited by epistemological boundaries and tends to serve the interests and values of powerful groups at the expense of others, particularly the most vulnerable. Moreover, the massive material demands, environmental resources, and cheap labor required to support AI development often go unrecognized (Crawford, 2021). As AI continues to evolve more quickly than regulations can keep pace, there is a pressing need for thoughtful leaders who know how to be actively and critically engaged in evolving AI while asking for accountability, responsibility, and transparency in the AI-driven decision-making process.

Insights from *Wu-wei* in this AI-driven World

Wu-wei wisdom is not governed by intellect but by being fully engaged in the situation and seeking synergy through effortless actions. Leaders are expected to bring their full presence to a situation, allowing them to perceive the contours and landscape of possibilities. Leadership development is not solely an intellectual process; it requires judgment that arises from embodied knowledge of the circumstances, as well as an awareness of emotions and virtues when they practice *wu-wei*. In an AI-driven world, wise leaders must remain vigilant about the biases present in data and how information is represented. As we demystify AI, they understand how AI can undermine human capital and diminish leaders' ability to manage interconnected consciousness within organizations. Furthermore, leaders struggle to immerse themselves in the unique aspects of situations when individuals are treated as mere data commodities, and when local skills and contexts are not adequately valued.

Amidst the realities of our new AI-driven world, our leaders need to understand and implement moral imperatives of leadership—develop deep understandings about the Dao (i.e., the principle of Universe), De (i.e., virtue of the Universe), Love, and the One world to serve as our guiding principles. We must intuitively understand the challenges, even though there is no data provided in the AI system. Individual leaders need to be humble and embrace our learned ignorance and develop capacities to imagine and judge large quantities of information beyond AI epistemology boundaries. Individually, they should know who they are (i.e., personhood), allow themselves to practice mindfulness in the present moment, and meditate. They ought to know how to empty out of the information provided by AI and fine-tune their skills and responsiveness, and grow to deliver consistent results across various situations regardless of AI datasets. They should enjoy the process of practicing and seem to be effortless and non-deliberative spontaneity (i.e., *wu-wei* state). They respect our existence of being humans and expect to become fully human through the practice of *wu-wei.* These practitioners realize that precision and optimization of human preferences in the AI system are not our human ethics. They provide more time for themselves and their followers to think and not develop automation biases. They fully understand the illusion of mastery required skills among low-skilled professionals, and lose economics of scope when many tasks are automated by AI. They guide their followers to learn basic skills and know how to communicate with the automated machines, such that they would not be abstracted from the situation and can still make an informed decision. They would not like to overestimate the effect of technology in the short run or underestimate its effect in the long run. Whether they embrace or apprehend how AI is integrated into their workplace or their lives, they clearly understand our lives are not defined by computer-aggregated data. And because they also know AI is a social-technology system created by human beings with its own epistemological assumptions about what knowledge is, they practice *wu-wei* and empty-out the knowledge created by AI with the practice of questioning, collaborating, imagining, and ongoing unlearning and relearning process. They know how to develop excellence through *wu-wei* as a management metaphor. They develop true wisdom from ambiguity and vagueness.

AI erodes potential leaders' capability to make wise judgments in addressing complex problems when leaders' specialized expertise is gradually replaced by AI's universal capabilities. In an AI-driven world, the emphasis on universal data extraction can distance decision-makers from real people providing local data, thereby preventing them from truly engaging with the consequences of these decisions. Iansiti and Lakhani (2020, p. 207) noted that this AI trend could reduce the effectiveness of specialized knowledge in addressing complex problems.

> *We are moving from an era of core competencies, differing from firm to firm and embedded deep in each organization, to an age shaped by data and analytics, powered by algorithms and hosted in the computing cloud for anyone to use….Each of these sectors now requires a similar technological foundation, along with common methods and tools, all powered by massive computing capacity that is available on demand. Emphasis on primary differentiation on the basis of cost, quality, and brand equity is shifting from specialized, vertical expertise to the firm's position in the network, its accumulation of differentiated data, and its deployment of a new generation of analytics.*

Thus, excessive dependence on AI could discourage leaders from appraising the particularity of the situation facing them and having time to seriously address it. They may not know they reinforce existing power structures and worsen labor conditions (Crawford, 2021; Lewchuk, 2017). They also do not understand how the current AI foundation model perpetuates human and system biases that deepen existing social and historical inequalities (Bommasani et al., 2023; Bommasani et al., 2024; Maslej et al., 2023; Rajesh et al., 2023; Sendak et al.,

2020). The complex layers of these algorithms are not explainable and transparent to users (Jin et al., 2024). Thus, potential leaders do not develop their refined capacities to make judgments in circumstances with ambiguities, conflicting values, and surprises that are beyond boundaries set by AI epistemology.

Life is more than just a constant stream of data. Many professionals are often unaware of the new forms of human suffering that emerge from AI data capitalism and colonialism. They tend to overlook local nuances and miss out on opportunities to create synergies through meaningful interactions with real-life contexts. Instead, their focus is primarily on acquiring data and controlling realities, which limits their ability to gain *wu-wei* wisdom. Their understanding is largely derived from AI systems that operate within specific epistemological frameworks.

AI is inevitably changing our perception of how our current choices related to AI technologies and systemic implementation will significantly affect leadership development. It is essential to consider how AI will reduce the abilities of potential leaders to make wise judgments. More research needs to be conducted on human-system interaction and communication, as well as on how the Eastern philosophy of wisdom, *wu-wei*, will help us to unlearn and empty out the knowledge we may glean from AI (Eshelman et al., 2012; Lyreskog et al., 2023; Vaill, 1989). Without proper interventions and steering AI innovation toward wiser leadership practices, social and wealth inequality are projected to increase, even among knowledgeable workers in developed countries.

Recommend *Wu-Wei* Practices for Leadership Development

Practitioners must engage their emotions, reasons, intuition, and intellect when they assess what the circumstances demand in the process of making wise judgments. They need to develop their skills of making wise judgment by being immersed in the circumstances with their emotions, reasons, intuition, and intellect when the circumstances are marked by ambiguity, surprise, and conflicting values (Shotter & Tsoukas, 2014). Wise leaders must assess the essence of the situation by being embedded in social practices and act in complex situations. They must draw on values that are grounded in common goods when they make judgements in highly contextualized situations. These common goods are related to the vitality of society. Acting well also leads to the fulfillment of a good life (Tasioulas, 2022).

The development of *wu-wei* capabilities in managing is possible through the acknowledgement of our personhood, continuous meditation, and mindfulness practices (Eshelman et al., 2012). Leaders need to practice meditation in silence and focus on the present moment through mindfulness, and then invite the realities to reveal themselves. When they practice bringing their full selves to the situations, they will discover the particularities of the situations that have seldom been addressed. They can listen deeply and see things clearly. They may experience the joy of spontaneous wonder and learning when they can develop deeper meanings behind the events that are sometimes hopeless in a highly competitive AI-driven business environment. They may learn how to narrate the ongoing processes in business activities and integrate them into their lives, even though many events seem fragmented and meaningless to observers. They know how to listen well, be oriented to learning and unlearning, be flexible and vulnerable, seek other possible options, practice resilience, be mindful of fear and the needs of their stakeholders, and know how to reframe the issues of the organization to be the needs of their stakeholders. Their *wu-wei* practices also lead them to be fully human.

Potential leaders perform *wu-wei* (effortless and unselfconsciousness) in their business activities when they know how to be immersed in the flow to be beneficial to myriad things without contending. They achieve peak performance by embracing the *wu-wei* attitude, practicing the development of spontaneous actions through prolonged immersion in situations, and remaining open to external events and internal consciousness. They can become fully human and to be fully functioning people as we can set aside time to be, to reflect, to access vital life energy in the stage of tranquil stillness, and to grow at a healthy and nurturing pace (Benefiel, 2005; Buscaglia, 1978; Eshelman, Lam, and Cook, 2012; Vaill, 1989).

Management educators can help students achieve a state of mental clarity through simple meditation practices, such as taking three minutes for deep breathing at the beginning of class. Educators need to be mindful of how social and technological learning environments influence the flow of learning and shape students' educational experiences. Educators should explicitly explain to students how distractions from digital technologies can impact

their cognitive abilities to think and engage meaningfully with their learning. Additionally, management educators must communicate the learning challenges that students may encounter in their courses. Educators should also emphasize the transient nature of reality and encourage students to practice *wu-wei*.

Students need to understand the importance of incorporating diverse perspectives and coming up with effective actions to address the needs of various stakeholders in a given situation. These actions are often temporary and represent the best responses in specific contexts. Students must envision the types of learners they will become as they transfer their knowledge from one context to another and adapt to the continuous changes in their professional lives. Students should also be guided to develop certain inquiry-based skills that involve a consciousness of the situation and the alignment of collective perceived realities. These skills will practice listening with charity and help themselves to observe how their assumptions, norms, and values operate in their inquiry. They can see how their consciousness of the situation will be part of the situation in which they have to act. They will learn how to act appropriately, effortlessly, and spontaneously (i.e., practice *wu-wei*). They should be guided to develop their habits of reflection and learn how to think about their growth and changes when they have to deliver results in a wide range of circumstances. They should also be facilitated to seek meanings for their growth and changes in select low-stakes and rewarding reflection assignments.

The practice of *wu-wei* in our management education will view human beings as "continuously becoming" (Vaill, 1989, p.137) and enhance students' spiritual development (Mirvis, 2008). Students should be empowered to examine the operation of consciousness and experience stillness as part of their human development. Such an approach develops students' abilities to "live with these ambiguities, and periodically to reconceptualize them" in a world with ambiguity or a high rate of change (Schoemaker, 2008, p.135). They will know the importance of increasing consciousness of the "inherent contradictions, dilemmas and predicaments of managerial situations" in a proper management education process (Chia, 2005). They will learn how to develop stronger empathy toward practitioners and evaluate their performance from their perspectives. In the process, they also learn how to allocate their attention resources properly and practice goodness without possessing them. They will be more conscious about their own growth and changes in the process of delivering results in a wide range of circumstances in our new AI-driven world. As management educators facilitate students to realize the moment of wonder and joy and practice *wu-wei* in many activities and reflection assignments, students can be fully human and fully embrace their different aspects of their lives. As a result, the management education can develop students' inner consciousness and provide character development that many educators advocate (Cameron, 2006; Donaldson, 2002; Ghoshal, 2005; MacIntyre, 1984; Huynh et al., 2017; Mintzberg & Gosling, 2002; Pfeffer & Fong, 2002; Schoemaker, 2008; Vaill, 1989).

The author proposes that it is important to invite and encourage professional management educators, university management students, and management professionals to fully experience *wu-wei* in their own lives and experience a freshness and joy in being present in each classroom or workplace. They are likely to be thoughtfully engaged in what they do and how they do it. They also develop their capacity to practice *wu-wei*. In summary, they learn how to purify their hearts, refine their experiences, empty their thoughts, and immerse themselves in the reality around them such that they can respond effortlessly. They grow and change themselves up to the highest spiritual state when they consciously produce fairly consistent intended results across a range of circumstances.

Conclusion and Future Research

The traditional Chinese wisdom of wu-wei (無為) may inspire management educators, university-level management students, and professionals to acknowledge, accept, and affirm personhood in an AI-driven world. *Wu-wei* offers management educators a transformative perspective to enhance performance. This approach encourages management educators, including myself, to empty ourselves and fully immerse ourselves in each situation and discover inherent synergy. Achieving this requires unlearning and self-reflection. Management educators must confront our inner fears and habitual interactions with students and materials, and be willing to unlearn as situations evolve. By embracing our limitations, anxieties, and the ambiguities inherent in various contexts, we can engage with our students patiently and humbly. It is essential to critically analyze our assumptions, habits, mental frameworks (schemas), and objectives within any given situation. Adopting a *wu-wei* attitude can lead us to re-envision our teaching practices, foster new connections with students, and inspire changes in our approaches.

Ideally, we, management educators, will cultivate our skills alongside our spiritual growth, aiming to transform ourselves and link our efforts to the greater good. As educators, we often encounter unexpected discoveries when we are fully engaged in the situation and actively seek synergy. We gain an understanding of the structures in which we operate and internalize various layers of shared meanings, enabling us to make daily adjustments through our presence in the situation. We learn what is considered legitimate within our context and define our boundaries. Additionally, we become attuned to our relationships with students and others in the AI-driven environment, leveraging these relationships to achieve specific objectives during our interactions. Being sensitive to our communication practices is crucial, particularly when capturing the attention of students on specific aspects of the learning process within the pedagogical framework we create. Management educators should remain open to spontaneous actions and improvised learning. Ultimately, our pedagogical approaches are linked to a broader common good and resonate with the creative force of Dao, manifesting in actions guided by De.

Potential or existing leaders, as well as informed and engaged workers and citizens are encouraged to reflect their true selves when they immerse themselves in their surroundings and embrace the flow of universal principles, such as the Dao, to promote the common good. Through their practice of *wu-wei*, they can unlearn their preconceived notions and make necessary adjustments to discover their authentic selves. When leaders find solace in silence and nothingness, they purify their thoughts and avoid imposing their limited beliefs on others. It is essential for leaders to understand the context of a situation, including the physical signals their bodies convey as they navigate it. Leaders are expected to perform and deliver results in uncertain and risky situations. They must balance and resolve the paradoxes and tensions that arise. Additionally, they need to preserve key human qualities and enable their followers to practice *wu-wei* in this AI-driven world.

References

Acemoglu, D. (2024). Harms of AI. In J. Bullock, Y. C. Chen, J. Himmelreich, V. M. Hudson, A. Korinek, M. M. Young, & B. B. Zhang (Eds.), *The Oxford handbook of AI governance* (pp. 660-706). Oxford University Press.

Acemoglu, D., & Johnson, S. (2023). *Power and progress: our thousand-year struggle over technology and prosperity*. PublicAffairs.

Acemoglu, D., & Johnson, S. (2024). *Learning from Ricardo and Thompson: Machinery and labor in the early industrial revolution, and in the age of AI*. MIT Shape the Future of Work.

Acemoglu, D., & Restrepo, P. (2022). Tasks, Automation, and the Rise in U.S. Wage Inequality, *Econometrica*, 90 (5), 1973–2016

Arnold, M. (2024 June 26). Central banks urged to 'raise game' on use of artificial intelligence. *Financial Times.*

Bangstad, S., & Nilsen, T.T. (2019). Thoughts on planetary: An interview with Achille Mbembe. *New Frame*, September 6.

Barrett, N. (2011). *Wuwei* and flow: comparative reflections on spirituality, transcendence, and skill in the Zhungzi. *Philosophy East & West.* 61 (4), 679-706.

Benefiel, M. (2005). *Soul at work : Spiritual leadership in organizations*. New York: Seabury Books.

Buscaglia, L. (1978). *Personhood: The art of being fully human.* New York: Fawcett Columbine.

Bommasani, R., Hudson, D. A., Adeli, E., Altman, R., Arora, S., von Arx, S., Bernstein, M. S., Bohg, J., Bosselut, A., Brunskill, E., Brynjolfsson, E., Buch, V., Cardie, C., Catanzaro, B., Chiang, M., Clark, J., De Sa, C., Demszky, D., Eismann, S., & Liang, P. (2022). *On the opportunities and risks of foundation models*. Center for Research on Foundation Models (CRFM), Stanford Institute for Human-Centered Artificial Intelligence (HAI), Stanford University. arXiv:2108.07258v3.

Bommasani, R., Klyman, K., Longpre, S., Kapoor, S., Maslej, N., Xiong, B., Zhang, D., & Liang, P. (2024). *The foundation model transparency index*. Center for Research on Foundation Models, Stanford University. https://crfm.stanford.edu/fmti/May-2024/index.html

Cameron, K. (2006). Good or not bad: Standards and ethics in managing change. *Academy of Management Learning & Education*, 5(3), 317-323.

Cazzaniga, M., Jaumotte, F., Li, L., Melina, G., Panton, A. J., Pizzinelli, C., Rockall, E. J., & Tavares, M. M. (2024). *Gen-AI: Artificial intelligence and the future of work*. IMF Staff Discussion Notes, 2024 (001), International Monetary Fund, Washington, DC. https://doi.org/10.5089/9798400262548.006

Chia, R. (2005). The aim of management education: Reflections on Mintzberg's 'Managers not MBAs'. *Organization Studies* , 26(7), 1090-1092.

Chia, R., & Holt, R. (2007). Wisdom as learned ignorance: Integrating East-West perspectives. In E. H. Kessler, J. R. Bailey (Eds.) *Handbook of Organizational and Managerial Wisdom* (pp. 505-526). SAGE Publications, Inc., https://doi.org/10.4135/9781412982726.n22

Corbin, T., Deranty, J., Young, J., Flenday, G., Gillet, A., Menary, R., & Podosy, P. (2025). We need to talk about GenAI grading and tutoring system. *AAPT Studies in Pedagogy* https://doi.org/10.5840/aaptstudies2025417101

Csikszeentimhalyi, M. (1990). *Flow: the psychology of optimal experience*. New York: Harper & Row, Publishers, Inc.

Couldry, N., & Mejias, U. A. (2019). Data colonialism: Rethinking big data's relation to the contemporary subject. *Television & New Media, 20*(4), 336-349. https://doi.org/10.1177/1527476418796632

Crawford, K. (2021). Conclusion: Power. In *The atlas of AI: Power, politics, and the planetary costs of artificial intelligence* (pp. 211–227). Yale University Press. https://doi.org/10.2307/j.ctv1ghv45t.10

Davies, D. (2024). *The unaccountability machine: Why big systems make terrible decisions-and how the world lost its mind*. London: Profile Books Ltd.

Dell'Acqua, F., McFowland III, E., Mollick, E., Lifshitz-Assaf, H., Kellogg, K. C., Rajendran, S., Krayer, L., Candelon, F., & Lakhani, K. R. (2023). Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality. *Harvard Business School Working Paper 24-013, 1-58*

Dent, E.B. (2020). Learning from a lifetime for provocative thinking about organizational dynamics. *Organizational Dynamics*. https://doi.org/10.1016/j.orgdyn.2020.100780

Dignum, V. (2021). The role and challenges of education for responsible AI. *London Review of Education*, 19(1), 1, 1-11.

Dignum, V. (2022). Responsible artificial intelligence: From principles to practice. arXiv/ ACM SIGIR Forum, 56 (1), June.

Donaldson, L. (2002). Damned by our own theories: Contradictions between theories and management education. *Academy of Management Learning & Education*, 1(1): 96-106

Eshelman, G.L., Lam, M., & Cook, M. (2012) "Three Contributing Factors to Effective Utilization of Technology in Management Education and Practice: Personhood, Mindfulness, and Meditation," Journal of the North American Management Society: Vol. 6: No. 1, Article 4. Available at: https://thekeep.eiu.edu/jnams/vol6/iss1/4

European Union (2024 May 21) *Artificial intelligence (AI) act: Council gives final green light to the first worldwide rules on AI* - Consilium (europa.eu)

Felten, E. W., Raj, M., & Seamans, R. (2023). *How will Language Modelers like ChatGPT Affect Occupations and Industries?* SSRN. Available at https://ssrn.com/abstract=4375268 or http://dx.doi.org/10.2139/ssrn.4375268

Ghoshal, S., (2005). Bad management theories are destroying good management practices. *Academy of Management Learning & Education*, 4 (1), 75-91.

Goldman Sachs. (2024a). *The US labor market is automating and becoming more flexible*. Retrieved April 25, 2024, from goldmansachs.com

Goldman Sachs. (2024b). *Gen AI: too much spend, too little benefit?* Retrieved June 27, 2024, from goldmansachs.com

Gratton, L. (2024). *What AI means for human capital*. Retrieved March 4, 2024, from https://sloanreview.mit.edu/video/what-ai-means-for-human-capital.

Hinton, G. (2023a). "Godfather of AI" Geoffrey Hinton Warns of the "Existential Threat" of AI | Amanpour and Company (youtube.com)

Hinton, G. (2023b). Prof. Geoffrey Hinton - "Will digital intelligence replace biological intelligence?" Romanes Lecture (youtube.com)

Huynh, A. Oakes, H., Shay, G. & McGregor, I. (2017). The wisdom in virtue: Pursuit of virtue predicts wise reasoning about personal conflicts. *Psychological Science*, Vol. 28 (2), 1848-1856

Iansiti, M., & Lakhani, K. R. (2020). *Competing in the Age of AI: Strategy and leadership when algorithms and networks run the world*. Harvard Business Press

IBM. (2023). *The augmented workforce for an automated, AI-driven world*. IBM Institute for Business Value (IBV).

Jin, Q., Chen, F., Zhou, Y., Smith, J., Johnson, A., Brown, L., Davis, M., Garcia, R., Martinez, P., Wilson, T., Anderson, K., Thomas, H., Jackson, W., Harris, G., Martin, B., Lee, C., Perez, S., Clark, N., & Young, E. (2024). Hidden flaws behind expert-level accuracy of multimodal GPT-4 vision in medicine. *npj Digital Medicine, 7*, 190. https://doi.org/10.1038/s41746-024-01185-7

Klinova, A. (2024). Governing AI to advance shared prosperity. In J. Bullock, Y. C. Chen, J. Himmelreich, V. M. Hudson, A. Korinek, M. M. Young, & B. B. Zhang (Eds.), *The Oxford handbook of AI governance* (pp. 726-745). Oxford University Press.

Korinek, A., Schindler, M., & Stiglitz, J. E. (2021). *Technological progress, artificial intelligence, and inclusive growth* (IMF Working Paper No. 2021/166). International Monetary Fund. https://doi.org/10.5089/9781513583280.001

Lam, M.L.L. (2024). AI facilitates or impedes human flourishing. *2024 Regent Research Roundtables Proceedings* pp.1-20. Regent University School of Business & Leadership. Microsoft Word - RRR2024 AI p 001-020 CR Facilitates or Impedes Human Flourishing Lam AI facilitates or impedes human flourishing / Maria Lai-Ling Lam - LCC International University

Lewchuk, W. (2017). Precarious jobs: Where are they, and how do they affect well-being? *The Economic and Labour Relations Review*, 28(3), 402-419. https://doi.org/10.1177/1035304617722943

Lyreskog, D. M., Zohny, H., Singh, I., & Savulescu, J. (2023). The ethics of thinking with machines: Brain-computer interfaces in the era of artificial intelligence. *International Journal of Chinese & Comparative Philosophy of Medicine.*

MacIntyre, A. (1984). *After Virtue*. Notre Dame: University of Notre Dame Press.

Maslej, N., Fattorini, L., Brynjolfsson, E., Etchemendy, J., Ligett, K., Lyons, T., Manyika, J., Ngo, H., Niebles, J. C., Parli, V., Shoham, Y., Wald, R., Clark, J., & Perrault, R. (2023). *Artificial intelligence index report 2023*. Stanford Institute for Human-Centered Artificial Intelligence. https://aiindex.stanford.edu/report/2023

Maslej, N., Fattorini, L., Perrault, R., Parli, V., Reuel, A., Brynjolfsson, E., Etchemendy, J., Ligett, K., Lyons, T., Manyika, J., Niebles, J. C., Shoham, Y., Wald, R., & Clark, J. (2024). *Artificial intelligence index report 2024*. Stanford Institute for Human-Centered Artificial Intelligence. https://aiindex.stanford.edu/report/2024

McKinsey & Co. (2023). The-state-of-ai-in-2023-generative-ais-breakout-year_vf.pdf (mckinsey.com)

Mintzberg, H. & Gosling, J. (2002). Educating managers beyond borders. *Academy of Management Learning & Education*, 1(1): 64-76.

Mirvis, P. (2008). Executive development through consciousness-raising experience. *Academy of Management Learning & Education*, 7(2), pp.173-188.

Mohamed, S., Png, MT., & Isaac, W. (2020) Decolonial AI: Decolonial Theory as Sociotechnical Foresight in Artificial Intelligence. *Philosophy and Technology* (405)

Nakamura, J., & Csikszentmihalyi, M. (2002). The concept of flow. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 89–105). Oxford University Press.

Pfeffer, J., & Fong, C.T. (2002). "The end of business schools? Less success than meets the eye," *Academy of Management Learning & Education*, 1(1): 78-95.

Rajesh, A. E., Davidson, O. Q., Lee, C. S., & Lee, A. Y. (2023). Artificial Intelligence and Diabetic Retinopathy: AI Framework, Prospective Studies, Head-to-head Validation, and Cost-effectiveness. *Diabetes care*, *46*(10), 1728–1739. https://doi.org/10.2337/dci23-0032

Reusser, A.Y., & Hougton University Faculty (2024). Hold your horses or full speed ahead? Faculty perspectives on Artificial Intelligence in Christian Liberal Arts Education. Christian Scholar's Review, Summer, 4:73-101.

Russell, S. (2019). *Human Compatible: AI and the Problem of Control.* London: Allen Lane.

Russell, S. (2022). Artificial Intelligence and the Problem of Control. In: Werthner, H., Prem, E., Lee, E.A., Ghezzi, C. (eds) *Perspectives on Digital Humanism.* Springer, Cham. https://doi.org/10.1007/978-3-030-86144-5_3

Russell, S. (2024, April 25). *AI: What if we succeed*. YouTube.

Schoemaker, P (2008). The future challenge of business: rethinking management education. *California Management Review*, 50 (3), 119-139.

Sendak, M. P., D'Arcy, J. Kashyap, S., Gao, M., Nichols, M., Corey, K., Ratliff, W., & Balu, S. (2020). A path for translation of machine learning products into health care delivery. *European Medical Journal Innovations*. https://doi.org/10.33590/emjinnov/19-00172

Slingerland, E. (2000). Effortless action: The Chinese spiritual ideal of wu-wei, *Journal of the American Academy of Religion,* 68 (2), 293-328.

Slingerland, E. G. (2003). Effortless action: *Wu-wei* as Conceptual metaphor and spiritual ideal in early China. New York: Oxford University Press.

Slingerland, E. (2014). *Trying not to try: the art and science of spontaneity*. New York: Crown Publishers

Sheikh, H., Prins, C., & Schrijvers, E. (2023). AI as a System Technology. In: *Mission AI. Research for Policy*. Springer, Cham.

Shotter, J., & Tsoukas, H. (2014). In search of phronesis: leadership and the art of judgment. *Academy of Management Learning & Education*, 13 (2), 224-234.

Tasioulas, J. (2022). Artificial Intelligence, Humanistic Ethics. *Daedalus*; 151 (2): 232–243.

Tacheva, J., & Ramasubramanian, S. (2023). AI Empire: Unraveling the interlocking systems of oppression in generative AI's global order. *Big Data & Society*, *10*(2). https://doi.org/10.1177/20539517231219241 (Original work published 2023)

UNESCO (2023). *Guidance for generative AI in education and research.*

Vaill, P. (1989). *Managing as a performing art: New ideas for a world of chaotic change*. San Francisco: Jossey-Bass Inc., Publishers.

Vaill, P. (2020). Practice. Accessed on June 8, 2020 from enactionresearch.com/podcast-page

WHO (2023*). Ethics and governance of artificial intelligence for health*.

Wiener, N. (1960). Some moral and technical consequences of automation. *Science* 131:1355-58.

Yearley, L. (1996). Zhuangzi's understanding of skillfulness and the ultimate spiritual state, in P. Kjellberg and P. Ivanhoe, eds., *Essays on Skepticism, Relativism, and Ethics in the Zhunangzi.* Albany: State University of New York Press, pp. 152-182

Woldridge, M. (2023). What's the future of generative AI [Video]. YouTube.

Zewe, A. (2022). A technique to improve both fairness and accuracy in artificial intelligence | MIT News | Massachusetts Institute of Technology.