Tattooed Workers: The Nature of the Tattoo Matters for Observer Perceptions and Treatment of Tattooed Colleagues

By:

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Abstract

In this dissertation, I examined observer perceptions and treatment of tattooed colleagues based on tattoo content. Guided by expectancy violations theory, I predicted dark tattoo content (e.g., intimidating) would elicit negative perceptions, namely lower competence, trustworthiness, artisticness, and higher riskiness, and subsequently greater negative treatment towards colleagues with dark tattoos. In contrast, I proposed light tattoo content (e.g., friendly) would elicit positive perceptions, namely higher competence, trustworthiness, artisticness, and lower riskiness, and subsequently greater positive treatment towards colleagues with light tattoos.

Study 1 was an experimental vignette study manipulating tattoo content, hierarchical position, and gender. Tattoo-specific stereotypes, i.e., perceived artisticness and riskiness, were significant outcomes of tattoo content, and mediated the indirect effects of dark tattoo content on subtle discrimination. In addition, hierarchical position moderated the indirect effect of dark tattoo content on subtle discrimination through perceived artisticness, namely this was significant when the tattooed colleague was a coworker or supervisor, but not a supervisor's supervisor.

Study 2 was another experimental vignette study where I manipulated tattoo-specific stereotypes and measured outcomes to enhance causal inferences about the indirect effects model of tattoo content on treatment toward tattooed colleagues through tattoo-specific stereotypes (i.e., perceived riskiness and artisticness). Results showed significant direct effects of perceived riskiness on all outcomes.

Study 3 was a field survey with employees who had a tattooed colleague. Results replicated for the indirect effects of dark tattoo content on negative treatment towards tattooed colleagues through tattoo-specific stereotypes of perceived riskiness and artisticness. Also, the indirect effects of light tattoo content on positive treatment towards tattoo colleagues through all stereotypes were significant. Hierarchical position moderated the indirect effects of light tattoo

content on positive treatment through perceived riskiness; this was significant when the tattooed colleague was a coworker or employee/follower, but not a supervisor or manager.

Three key takeaways: (1) the tattoo content matters, (2) tattoo-specific stereotypes explain the effects of tattoo content on treatment of tattooed colleagues, and (3) stereotypes elicited in the observer matter, because the same tattoo can be perceived as a sign of artisticness and riskiness, with each differentially affecting subsequent treatment of tattooed colleagues.

Acknowledgements

I really enjoy reading Acknowledgements sections, and truthfully, I drafted my own acknowledgements early in the PhD because I was excited to document everyone that helped me along the way. However, as I near the end and have to actually write the acknowledgements that will live forever online, I keep thinking of advice my supervisor, Dr. Julian Barling, gave me when I was unsure who to thank during an award acceptance speech–I cannot remember verbatim, but it was along the lines of consider who is in the audience. The idea being thank the relevant people in the audience during the speech, and the relevant people who are not in the audience, can personally be told thank you (or this is how I remember the advice anyway). Considering there are many people that have helped me along the way that will likely never read my dissertation, I will focus on the people that will likely read it (or at least parts of it).

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Statement of Originality

I hereby certify that all of the work described within this dissertation is the original work of the author. Any published (or unpublished) ideas and/or techniques from the work of others are fully acknowledged in accordance with the standard referencing practices.

Alyssa Grocutt

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Chapter 1:

Introduction – A Brief History of Tattoos

Tattoos are by no means a new concept; the art of marking the skin has been around for thousands of years. The oldest known tattoos were on Ötzi the Iceman sometime between ~3370–3100 BC (Deter-Wolf et al., 2016), who was found in the Alps between Italy and Austria (Barfield, 1994), and whose tattoos are theorized to have been for therapeutic reasons (Deter-Wolf et al., 2024). In addition, archaeological research shows signs of early tattooing in ancient Egypt (e.g., Friedman, 2018). In North and South America, Indigenous peoples have long used tattoos for various reasons, such as rites of passage (Deter-Wolf & Diaz-Granados, 2013; Levin, 2008). Throughout this long history, the meaning and acceptance of tattoos has varied over time and across cultures.

On the one hand, tattoos have been used for positive practices. In Ancient Egypt, for example, tattoos were used for protective and spiritual purposes, such as to promote fertility and childbirth with a pattern resembling a net on women's abdomens (Fletcher, 2005). Since then, several cultures have used tattoos for identity and belonging purposes. For example, tattoos have been used to identify group membership and express individual identity among Māori in New Zealand (Nikora et al., 2007; Pritchard, 2001) and Indigenous peoples in North America (Alvarez, 2019). In addition, tattoos have been thought to signify rites of passage in some cultures, such as Visayan cultures (Ragragio & Paluga, 2023).

On the other hand, there are many examples of tattoos being perceived negatively, particularly in being associated with crime and deviance. Tattoos were used as a basis to stigmatize and punish criminals with tattooing them to signal their "otherness" and deviance from "normal" society in Ancient Greece and Rome (Dinter & Khoo, 2019; Patterson, 2018;

Rees, 2019) and Ancient China (Lei, 2009; Reed, 2000). Another example of the negative use of tattoos occurred during World War II, with prisoners of concentration camps forcibly tattooed with numbers on their forearms for bureaucratic reasons, and as a way to oppress and dehumanize them (Bloch, 2024; DeMello, 2016).

Historically in North America[1], tattoos have typically been associated with criminals, bikers, and sailors because these were primarily the groups of people who had tattoos (e.g., Bengtsson et al., 2005; Lane, 2020), and have been pathologized and linked to psychological abnormality (Lane, 2014). A common theme in the United States was tattoos among sailors and soldiers with reasons such as celebrating travels, battle, patriotism, and camaraderie (e.g., Dyvik & Welland, 2018). During the 1800s, professional tattooers started to open shops in the United States, and by the late 1800s, tattoos were growing among sailors, soldiers, circus performers, and people among the working class (e.g., Atkinson, 2003; DeMello, 2000; Govenar, 1982). The early to mid 1900s saw a rise in tattoos among gang members as ways to identify gang affiliation (Atkinson, 2003; DeMello, 2000). In the mid-1900s, tattoos were becoming popular as a sign of rebellion from the mainstream society and associated with motorcycle culture, rock n' roll, and blue-collar people (Atkinson, 2003; DeMello, 2000).

Throughout the 20th century, there was a rise in the number of people with tattoos. By the 1960s, tattoos were on the rise in North America yet were illegal in many cities and states within the United States (e.g., New York City and Massachusetts; Kosut, 2014; Richard, 2023), which contributed to stigma towards people with tattoos. In the 1970s and 1980s, the popularity as evidenced by the number of tattoos increased even further (Rubin, 1988), followed by an even

[1] This is in regard to settler populations in North America, Indigenous populations have their own tattoo rituals and do not view tattoos the same way as settlers (e.g., Levin, 2008).

greater increase in the 1990s and early 2000s when tattoos entered mainstream media and popular culture (e.g., Miami Ink television show; Larsen et al., 2014; Patterson, 2018).

DeMello (1995) claimed that with this rise in popularity, there was a shift from stigma to status; however, this is not supported by empirical findings. At the same time as this rise in popularity, there was a shift in tattooing towards art with more variety in content and customized designs (Kosut, 2006, 2014; Lane, 2014), which could create nuance in perceptions of tattoos.

Anecdotally, by 2025, many people believe perceptions of tattooed individuals have changed and that negative stereotypes are no longer the norm. It is the case that the number of people with tattoos is increasing. For example, in the United States, 21% of people reported having at least one tattoo in 2012, and this number increased to 30% by 2019 (Jackson, 2019). However, although the number and visibility of those with tattoos may be increasing, and under certain conditions perceptions may be more neutral, there are still negative stereotypes attributed to those with tattoos. Common stereotypes of tattooed individuals include being unintelligent, dishonest, bad (Broussard & Harton, 2018), and dirty, untrustworthy, and rebellious (Cortini et al., 2019). Notably, there are also studies reporting positive perceptions of tattooed individuals, such as perceiving tattoos as art and self-expression rather than deviance (e.g., Armstrong et al., 2004). However, most studies on perceptions of tattoos continue to focus on stigma towards tattooed individuals. The increased prevalence has not eliminated stigma, but rather has made it more nuanced (Larsen et al., 2014).

A Brief History of Tattoos in the Workplace

Despite the growing popularity of tattoos throughout the 20th century and into the 21st century, they have still been considered taboo in the workplace. This taboo nature of tattoos at work is apparent in (1) companies preferring non-tattooed workers or having policies prohibiting

visible tattoos (Dale et al., 2009), and (2) tattooed workers choosing to keep their tattoos hidden out of fear of repercussions (e.g., Atkinson, 2003). First, in the 1990s, many employers reported that they would not hire visibly tattooed job applicants (Bekhor et al., 1995). Further, tattoos were explicitly prohibited in company policies into the 2000s (e.g., Dale et al., 2009). For example, prior to 2014, Starbucks—often considered to be a progressive company—did not allow any visible tattoos on employees (Bradford, 2014). Based on employee feedback including a petition to change the dress code, Starbucks changed their policy to allow greater self-expression, namely tattoos, some piercings, and more flexibility in clothing choices, for their employees (Horovitz, 2014). By 2025, the company policy still prohibits some tattoos, namely those on the face or those that are obscene, profane, racist, or sexual (Starbucks, n.d.). However, Starbucks does explicitly state in their policy how prohibited tattoos can be covered during work (e.g., with makeup; Starbucks, n.d.), which suggests that even these prohibited tattoos would not preclude hiring those with such tattoos.

Second, many employees choose to get tattoos in non-visible spots or choose to cover their tattoos at work. This is apparent from statistics showing that approximately 70% of tattooed individuals usually have their tattoos covered (Heimlich, 2010; Narrative Research, 2024). In addition, findings that workers cover their tattoos have emerged in both early research on tattoos at work (e.g., Atkinson 2003), and more recent research on tattoos at work (e.g., Wood & Broadbridge, 2023).

In the 2020s, we still see negative stereotypes and stigma towards tattooed individuals in the workplace. Starting during the selection process, tattooed job applicants are less likely to be hired than applicants without tattoos (e.g., Henle et al., 2022), and this extends to on-the-job experiences with tattooed workers treated negatively in the workplace (e.g., greater perceived

discrimination; Tews & Stafford, 2020b). However, there is nuance in perceptions of tattooed individuals in the workplace with perceptions depending on various factors, such as job context and tattoo content. For example, tattoos are perceived positively when creativity is involved in the job, such as crowdfunding for creative startups (Kincaid et al., 2022), hiring a graphic designer (Ruggs & Hebl, 2022), or when tattoos fit the organizational brand image, such as a nightclub, a pub, or a skate shop (Timming, 2017). In addition, job applicants with dark (i.e., aggressive, distracting, overdone) visible tattoos are less likely to be hired than those with light (i.e., harmless, pleasant, subtle) visible tattoos or no visible tattoos (Henle et al., 2022). Overall, the research on tattoos in the workplace shows that there is stigma towards those with tattoos; however, there is nuance to this stigma.

Dissertation Overview

My research focuses on understanding this nuance better, specifically by focusing on tattoo content. I propose that dark content tattoos (e.g., intimidating, threatening) will elicit negative reactions whereas light content tattoos (e.g., friendly, cheerful) will elicit positive reactions. These opposing reactions can be explained by drawing from expectancy violations theory (Burgoon, 2015; Burgoon & Hale, 1988). With approximately 32% of the American population tattooed (Schaeffer & Dinesh, 2023), and not all tattooed individuals having visible tattoos, seeing tattoos in the workplace can be considered a violation of expectations. Supporting the notion that tattoos are a violation of expectations, recent research points to the belief that employees should keep tattoos covered at work is still common (Foulke & Romo, 2021; Wood & Broadbridge, 2023). I propose that the valence of the expectancy violation depends on the tattoo content. Specifically, I propose that dark content tattoos are a negative expectancy violation and thus elicit negative reactions from observers, while light content tattoos are a positive expectancy

violation eliciting positive reactions from observers. See Figure 1.1 for my proposed conceptual model.

In Study 1, I test the opposing effects of tattoo content, namely dark versus light compared to no tattoos, on perceptions and treatment of tattooed colleagues in an experimental vignette. For perceptions, I include two context-free stereotypes–namely, perceived competence and trustworthiness–and two tattoo-specific stereotypes–namely, perceived artisticness and riskiness. To examine the treatment of tattooed colleagues, I investigate subtle discrimination and interpersonal fairness as negative and positive treatment outcomes, respectively. Notably, for these outcomes, I include self-report measures and an email task which is coded for the outcomes by trained research assistants (RAs). I test both the direct effects of dark and light tattoo content on perceptions, namely perceived competence, trustworthiness, artisticness, and riskiness, and treatment, namely subtle discrimination and interpersonal fairness, as well as the indirect effects of dark and light tattoo content on treatment through perceptions (see Figure 1.1). In addition, I explore the role of hierarchical position of the tattooed worker by varying whether they are presented as a coworker, supervisor, or supervisor's supervisor, and the role of gender by varying whether the tattooed worker is a woman or a man.

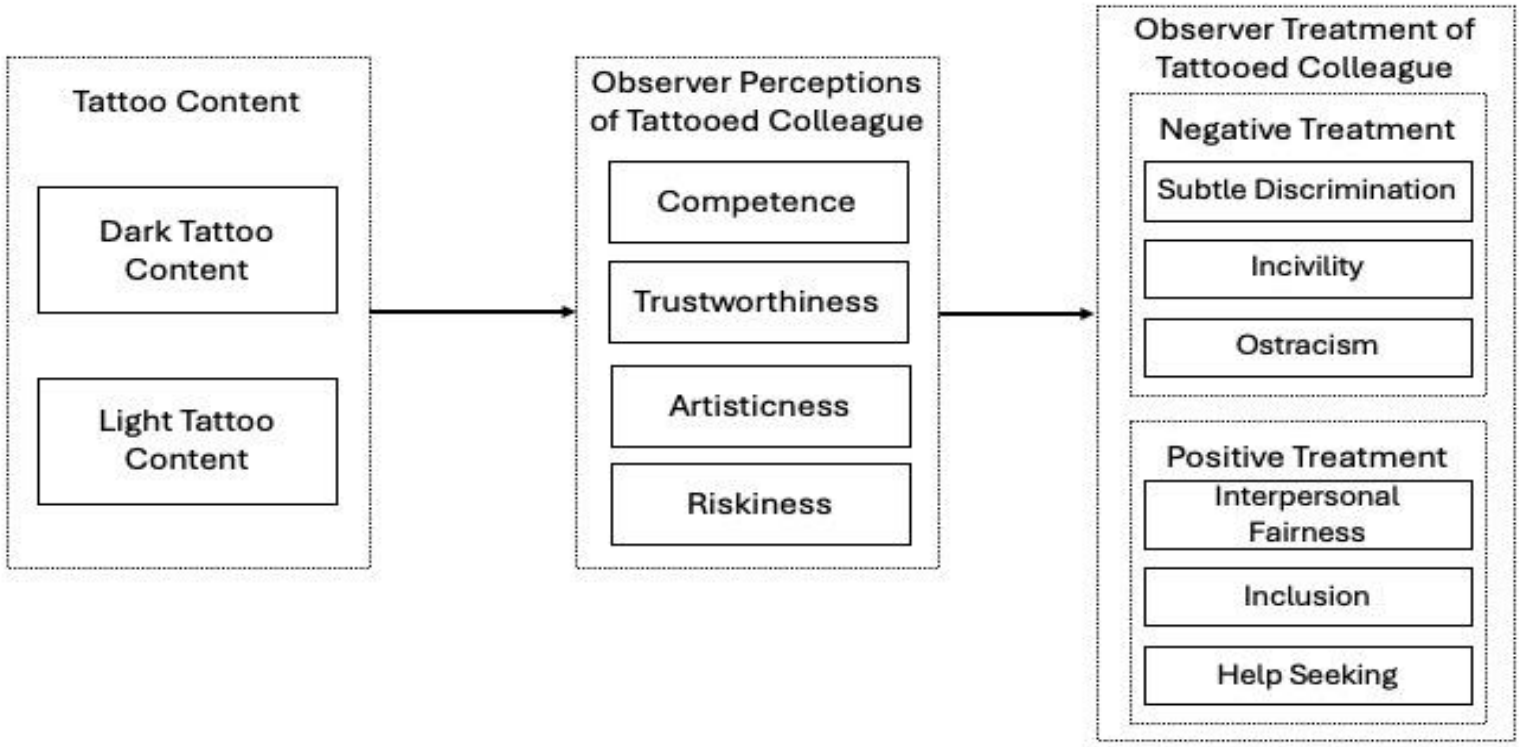
Any causal inferences that can be drawn from Study 1 are limited to the effects of the predictors on the mediators. As such, the goal of Study 2 is to provide stronger causal inferences to the indirect effects (i.e., mediation) model tested in Study 1, which is a suggested practice for experiments testing mediation models (Pirlott & MacKinnon, 2016; Stone-Romero & Rosopa, 2011). Thus, for Study 2, I conduct a second experimental study using a vignette to manipulate the tattoo-specific stereotype mediators, namely perceived artisticness and riskiness, from Study 1 and measure the outcomes (all outcomes have self-report measures, with the subtle

discrimination and interpersonal fairness outcomes also having external ratings obtained through the same email writing task as in Study 1). Specifically, I manipulate perceived artisticness and riskiness (and compare them to a good worker reference group). In addition, I expand on the outcomes to include subtle discrimination, incivility, and ostracism as negative treatment, and interpersonal fairness, inclusion, and help seeking as positive treatment.

In Study 3, I aim to replicate the findings of the effects of dark and light tattoo content on stereotypes and treatment of tattooed colleagues in a field survey. In this study, I focus on employees' actual perceptions of their own tattooed colleagues. To do so, I recruit employees who have a colleague with tattoos. I measure their perceptions of the darkness and lightness of their colleague's tattoos, perceptions of their colleague's competence, trustworthiness, artisticness, and riskiness, and measure both negative (subtle discrimination, incivility, and ostracism) and positive (interpersonal fairness, inclusion, and help seeking) treatment outcomes. Again, measures of all outcomes (i.e., subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking) are obtained from self-reports, with external ratings for subtle discrimination and interpersonal fairness, which were again collected from the same email writing task coded by trained RAs.

Taken together, these studies expand our knowledge on nuanced stigma towards tattooed workers, testing whether (a) the content of the tattoo(s) makes a difference, (b) the context specificity of the stereotypes matters, (c) there are both negative and positive outcomes, and (d) causal inferences are appropriate.

Figure 1.1
Proposed Indirect Effects Model



Note. Study 1 tests the indirect effects of both tattoo contents through all mediators to subtle discrimination and interpersonal fairness as outcomes. Study 2 tests perceptions of artisticness and riskiness to all outcomes. Study 3 tests all tattoo content, perceptions, and treatment outcomes.

References

Alvarez, P. (2019). Indigenous (re) inscription: Transmission of cultural knowledge (s) through tattoos as resistance. In Kloß, S. T. (Ed.). *Tattoo histories: Transcultural perspectives on the narratives, practices, and representations of tattooing* (pp. 157-175). Routledge.

Armstrong, M. L., Roberts, A. E., Owen, D. C., & Koch, J. R. (2004). Toward building a composite of college student influences with body art. *Issues in Comprehensive Pediatric Nursing*, *27*(4), 277-295.

Atkinson, M. (2003). *Tattooed: The sociogenesis of a body art*. University of Toronto Press.

Barfield, L. (1994). The iceman reviewed. *Antiquity, 68*(258), 10-26.

Bekhor, P. S., Bekhor, L., & Gandrabur, M. (1995). Employer attitudes toward persons with visible tattoos. *Australasian Journal of Dermatology*, *36*(2), 75-77.

Bengtsson, A., Ostberg, J., & Kjeldgaard, D. (2005). Prisoners in paradise: Subcultural resistance to the marketization of tattooing. *Consumption Markets & Culture*, *8*(3), 261-274.

Bloch, A. (2024). The body as a canvas: Memory, tattoos and the Holocaust. *The Sociological Review*, *72*(6), 1317-1334.

Bradford, H. (2014, October 16). *Starbucks to finally let employees show their tattoos*. HuffPost. https://www.huffpost.com/entry/starbucks-tattoos-policy-work_n_5999746

Broussard, K. A., & Harton, H. C. (2018). Tattoo or taboo? Tattoo stigma and negative attitudes toward tattooed individuals. *The Journal of Social Psychology, 158*(5), 521-540.

Burgoon, J.K. (2015). Expectancy violations theory. In Berger, C.R., Roloff, M.E., Wilson, Dillard, J.P., Caughlin, J., & Solomon, D. (Eds.), *The international encyclopedia of interpersonal communication*. Wiley.

Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communications Monographs, 55*(1), 58-79.

Cortini, M., Bortune, R., & Fantinelli, S. (2019). Personnel selection and body art. A mix-method study on tattooed job candidates. *International Journal of Scientific and Technological Research, 8*(9), 1966-1970.

Dale, L. R., Bevill, S., Roach, T., Glasgow, S., & Bracy, C. (2009). Body adornment: A comparison of the attitudes of businesspeople and students in three states. *Academy of Educational Leadership Journal, 13*(1), 69-77.

DeMello, M. (1995). "Not Just For Bikers Anymore": Popular representations of American tattooing. *Journal of Popular Culture*, *29*(3), 37-52.

DeMello, M. (2000). *Bodies of inscription: A cultural history of the modern tattoo community*. Duke University Press.

DeMello, M. (2016). Memories on the skin: A brief cultural history of tattooing. In Davidson, D. (Ed.). *The Tattoo Project: Commemorative Tattoos, Visual Culture, and the Digital Archive* (pp. 21-29). Canadian Scholars.

Deter-Wolf, A., & Diaz-Granados, C. (2013). *Drawing with great needles: Ancient tattoo traditions of North America*. University of Texas Press.

Deter-Wolf, A., Robitaille, B., Krutak, L., & Galliot, S. (2016). The world's oldest tattoos. *Journal of Archaeological Science: Reports*, *5*, 19-24.

Deter-Wolf, A., Robitaille, B., Riday, D., Burlot, A., & Jacobsen, M. S. (2024). Chalcolithic tattooing: Historical and experimental evaluation of the Tyrolean Iceman's body markings. *European Journal of Archaeology, 27*(3), 267-288.

Dinter, M. T., & Khoo, A. (2019). “If skin were parchment…”: Tattoos in antiquity. In Kloß, S. T. (Ed.). *Tattoo histories: Transcultural perspectives on the narratives, practices, and representations of tattooing* (pp. 85-102). Routledge.

Dyvik, S. L., & Welland, J. (2018). War ink: Sense-making and curating war through military tattoos. *International Political Sociology*, *12*(4), 346-361.

Fletcher, J. (2005). The decorated body in ancient Egypt: Hairstyles, cosmetics and tattoos. In L. Cleland, M. Harlow, & L. Llewellyn-Jones (Eds.), *The Clothed Body in the Ancient World,* (pp. 3-13). Oxbow.

Friedman, R. (2018). New tattoos from Ancient Egypt. In L. Krutak & A. Deter-Wolf (Eds.), *Ancient ink: The archaeology of tattooing*, (pp. 11-36). University of Washington Press.

Foulke, M., & Romo, L. K. (2021). An examination of how young adults manage verbal disclosure of their tattoo(s). *Qualitative Research Reports in Communication, 22*(1), 39-46.

Govenar, A. B. (1982). The changing image of tattooing in American culture. *Journal of American Culture*, *5*(1), 30-37.

Heimlich, R. (2010, March 24). *Tattoo Taboo*. Pew Research Center. https://www.pewresearch.org/short-reads/2010/03/24/tattoo-taboo/

Henle, C. A., Shore, T. H., Murphy, K. R., & Marshall, A. D. (2022). Visible tattoos as a source of employment discrimination among female applicants for a supervisory position. *Journal of Business and Psychology*, *37*, 107-125.

Horovitz, B. (2014, October 16). *Tattoos, nose studs OK for Starbucks baristas*. USA Today. https://www.usatoday.com/story/money/business/2014/10/16/starbucks-tattoos-nose-studs-baristas-dress-code/17369455/

Jackson, C. (2019, August 29). *More Americans Have Tattoos Today than Seven Years Ago*. Ipsos. https://www.ipsos.com/en-us/news-polls/more-americans-have-tattoos-today

Kincaid, P. A., Short, J. C., & Wolfe, M. T. (2022). Got ink, get paid? Exploring the impact of tattoo visibility on crowdfunding performance. *Journal of Business Venturing Insights, 17*, e00317.

Kosut, M. (2006). An ironic fad: The commodification and consumption of tattoos. *The Journal of Popular Culture*, *39*(6), 1035-1048.

Kosut, M. (2014). The artification of tattoo: Transformations within a cultural field. *Cultural Sociology*, *8*(2), 142-158.

Lane, D. C. (2014). Tat's all folks: An analysis of tattoo literature. *Sociology Compass*, *8*(4), 398-410.

Lane, D. C. (2020). *The Other End of the Needle: Continuity and Change Among Tattoo Workers*. Rutgers University Press.

Larsen, G., Patterson, M., & Markham, L. (2014). A deviant art: Tattoo-related stigma in an era of commodification. *Psychology & Marketing*, *31*(8), 670-681.

Lei, D. P. (2009). The blood-stained text in translation: Tattooing, bodily writing, and performance of Chinese virtue. *Anthropological Quarterly*, *82*(1), 99-127.

Levin, J. (2008). *Tattoos and indigenous peoples*. The Rosen Publishing Group, Inc.

Narrative Research. (2024, March 21). *One third of Canadians have tattoos, and most have no regrets about getting them.* https://narrativeresearch.ca/one-third-of-canadians-have-tattoos-and-most-have-no-regrets-about-getting-them/

Nikora, L. W., Rua, M., & Te Awekotuku, N. (2007). Renewal and resistance: Moko in contemporary New Zealand. *Journal of Community & Applied Social Psychology*, *17*(6), 477-489.

Patterson, M. (2018). Tattoo: marketplace icon. *Consumption Markets & Culture*, *21*(6), 582-589.

Pirlott, A. G., & MacKinnon, D. P. (2016). Design approaches to experimental mediation. *Journal of Experimental Social Psychology*, *66*, 29-38.

Pritchard, S. (2001). An essential marking: Maori tattooing and the properties of identity. *Theory, Culture & Society*, *18*(4), 27-45.

Ragragio, A. M. M., & Paluga, M. D. (2023). An anthropological rethinking of the Pintados and early tattooing in the Visayas, Central Philippines. *South East Asia Research*, *31*(3), 324-346.

Reed, C. E. (2000). Tattoo in early China. *Journal of the American Oriental Society, 120*(3), 360-376.

Rees, O. (2019). Incompatible inking ideologies in the ancient Greek world. In Kloß, S. T. (Ed.). *Tattoo histories: Transcultural perspectives on the narratives, practices, and representations of tattooing* (pp. 277-294). Routledge.

Richard, B. (2023, October 5). *Why Massachusetts banned tattoos for 38 years*. 1420 WBSM: New Bedford's News-Talk Station. https://wbsm.com/massachusetts-banned-tattoos-38-years/

Richie, D. & Buruma, I. (1980). *The Japanese tattoo*. Weatherhill Inc.

Rubin, A. (1988). *Marks of civilization: Artistic transformations of the human body*. Museum of Cultural History, University of California, Los Angeles.

Ruggs, E. N., & Hebl, M. R. (2022). Do employees' tattoos leave a mark on customers' reactions to products and organizations? *Journal of Organizational Behavior, 43*(6), 965-982.

Schaeffer, K., & Dinesh, S. (2023, August 15). *32% of Americans have a tattoo, including 22% who have more than one*. Pew Research Center. https://www.pewresearch.org/short-reads/2023/08/15/32-of-americans-have-a-tattoo-including-22-who-have-more-than-one/#:~:text=Gender%3A%2038%25%20of%20women%20have,and%2014%25%20of%20Asian%20Americans

Starbucks. (n.d.). *Dress code guide*. https://careers.starbucks.com/uploads/sites/7/2025/05/Dress-Code-Guide-Canada-CO.pdf

Stone-Romero, E. F., & Rosopa, P. J. (2011). Experimental tests of mediation models: Prospects, problems, and some solutions. *Organizational Research Methods*, *14*(4), 631-646.

Tews, M. J., & Stafford, K. (2020b). Tattoos and unfavorable treatment among employees in the hospitality industry. *International Journal of Contemporary Hospitality Management*, *32*(5), 1925-1940.

Timming, A. R. (2017). Body art as branded labour: At the intersection of employee selection and relationship marketing. *Human Relations*, *70*(9), 1041-1063.

Wood, B., & Broadbridge, A. (2023). A Tattooed Workforce–Still a Liability? In *The Emerald Handbook of Appearance in the Workplace* (pp. 317-330). Emerald Publishing Limited.

Chapter 2:

Theoretical Background

Research on tattoos at work is relatively new but growing. Early studies explicitly asked employers if visible tattoos would affect their decision to hire someone, and most employers said that they would be influenced by tattoos, with some employers indicating that they would not hire someone with tattoos (Bekhor et al., 1995). Consistent with the increase in the number of tattooed workers, research on the topic increased in the late 2000s and into the 2010s with both qualitative and quantitative studies, primarily focusing on three areas[2]: (1) consumer or customer perceptions of tattooed workers, (2) perceptions of tattooed job applicants in the recruitment and selection process, and (3) employee perceptions of tattooed colleagues.

First, customer perceptions of tattooed employees is a topic of interest in many areas, perhaps especially in retail, hospitality and healthcare. Customers perceive tattooed workers, compared to non-tattooed workers, as less appropriate or professional in appearance (Dean, 2011; Verissimo et al., 2016; Zidenberg et al., 2022), and have lower confidence in tattooed workers' abilities (Dean, 2011). There is nuance when considering customer characteristics, job context, and tattoo content. Customer characteristics that play a role in perceptions of tattooed workers include age, with older adults having more negative views of tattooed workers than do younger adults (Dean 2010; Wood & Broadbridge, 2023). For job context, customers are more accepting of tattoos on tattoo artists, bartenders, trades workers, and fast-food workers, whereas they are less accepting of tattoos on doctors, nurses, and lawyers (Wood & Broadbridge, 2023). Similarly, customers are less likely to want a tattooed mechanic, compared to non-tattooed, but are considerably less likely to want a tattooed surgeon compared to a non-tattooed surgeon

[2] There is research on tattooed workers perceptions; however, I focus on others' perceptions here because that is the area in which my research questions are concerned.

(Baumann et al., 2016). With tattoo content, employees with feminine tattoos are perceived more positively than those with masculine tattoos, and this was the case for women in automotive sales and real estate, and men in real estate but not in automotive sales (Arndt & Glassman, 2012). Interestingly, potential clients of mental health professionals perceived psychologists with a flower tattoo equivalently to those with no tattoos, and those with a tattoo of a skull surrounded by flames and flowers as more interesting, competent, confident, and likeable (Zidenberg et al., 2022).

Second, in selection research, tattoos are generally perceived as a limiting (biasing) factor in the hiring process (Adisa et al., 2021), although this does depend on factors such as job position and tattoo placement (Antonellis et al., 2017; Antonellis & Silsbee, 2018; Cortini et al., 2019; Uzunogullari & Brown, 2021). Overall, tattooed job applicants are less likely to be hired than non-tattooed job applicants (Brallier et al., 2011; Henle et al., 2022; Tetteh et al., 2022; Tews & Stafford, 2020a).

Taking a more nuanced view, there are significant differences in outcomes for tattooed job applicants depending on the job context and tattoo content. Regarding job context, tattoos are perceived positively in hiring decisions when tattoos fit the brand image (Efthymiou et al., 2023; Timming, 2017), or when the job is considered creative (e.g., Ruggs & Hebl, 2022). With tattoo content, there are differences depending on whether the content is considered dark (e.g., intimidating and threatening) versus light (e.g., friendly and cheerful). Job applicants with dark visible tattoos are rated lower on likelihood of hiring than those with light visible tattoos or no visible tattoos (Burgess & Clark, 2010; Henle et al., 2022). However, Tews, Stafford, and Kudler (2020) found no main effect of tattoo content on hiring decisions.

Third, perceptions and treatment of tattooed colleagues has received comparably less research attention. Earlier research showed lower acceptance of tattooed colleagues with customer-facing job positions or with jobs that required sharing commissions (Miller et al., 2009). Other research on this topic has asked tattooed workers to report their perceived treatment in the workplace (e.g., perceived discrimination and fairness; Tews & Stafford, 2020b; and unwanted sexual attention; Tews, Stafford, & Jolly, 2020). Workers with visible tattoos are more likely to receive unwanted sexual attention (Tews, Stafford, & Jolly, 2020); however, the wording of the items for unwanted sexual attention refer to "someone at work" leaving it unclear whether this attention is from coworkers, supervisors, subordinates, or customers. With the way in which observers treat tattooed workers, there is also some nuance when we look at tattoo characteristics, such as number, visibility, and content. The greater the number of tattoos, the greater perceived discrimination, yet tattoo visibility is not related to perceived discrimination or fair interpersonal treatment (Tews & Stafford, 2020b). For content, dark tattoo content is significantly related to greater perceived discrimination and less perceived fair interpersonal treatment; however, light tattoo content is not related to either of these forms of treatment (Tews & Stafford, 2020b).

Taken together, the focus of research on tattoos in the workplace has overwhelmingly looked at perspectives of customers and hiring managers, with limited attention given to on-the-job experiences or colleague perceptions and behaviour. From the selection research, it is clear that tattooed job applicants are still less likely to be hired than their non-tattooed counterparts; however, this does not mean that they will not get hired. For example, 70.2% of hiring managers shown a tattooed job applicant said they would hire the applicant, with 87.8% of those shown the non-tattooed job applicant indicating they would hire the applicant (Brallier et al., 2011).

Similarly, the likelihood of hiring ratings for tattooed job applicants, while lower than those of non-tattooed applicants, are above scale midpoints (e.g., mean of 4.53 on a 1 = not at all to 7 = extremely scale; Henle et al., 2022) indicating that tattoos may lower, but do not eliminate the chances of being hired. In addition, having tattoos is unrelated to employment status (i.e., employed versus unemployed) after controlling for education (French et al., 2016), and with regard to gender, having tattoos is not significantly related to employment status for women while it is positively related to employment status for men (French et al., 2019).

As such, tattooed individuals clearly do find work, but it remains important to understand how tattooed workers are treated once in the workplace. For example, are they treated less favourably on-the-job than their non-tattooed counterparts, and if so, why they are treated differently. In addition, examining this from the perspective of colleagues' perceptions and treatment of tattooed workers can enable practical implications to address colleague perceptions and treatment by identifying why tattooed workers are treated differently.

I draw from stigma (Link & Phelan, 2001) and expectancy violations theory (Burgoon, 2015; Burgoon & Hale, 1988) to understand why and how colleagues view those with tattoos differently, and the role of tattoo content. I use these theories to guide my research on how and why tattooed workers may be perceived and treated; however, my research is not an explicit test of these theories.

Stigma and Expectancy Violations Theory

We expect people not to have visible tattoos. Although tattoos are becoming increasingly common, the majority of people still do not have tattoos. Approximately one third of the adult population in the United States has one or more tattoos (Schaeffer & Dinesh, 2023). Further, not all those with tattoos have visible tattoos, with 72% of those in the United States (Heimlich,

2010) and 70% of those in Canada (Narrative Research, 2024) saying that their tattoos are usually not visible[3]. As such, most people that we encounter on a daily basis will not have visible tattoos, which means that when interacting with others, we expect that they will not have visible tattoos. Visible tattoos–which as an aspect of appearance, can be considered a form of non-verbal communication (Burgoon et al., 2022)–violate this expectation thereby causing observers to identify and label visibly tattooed persons as different (i.e., the first component of stigma; Link & Phelan, 2001).

Further, visible tattoos violate the expectations of professional or formal appearance in the workplace. Tattoos are similar to attire in that both are forms of self-expression; however, tattoos are permanent whereas attire is easily changed. For example, an employee can dress in more gothic attire, which would also violate appearance expectations, but they can easily change into attire that is more traditionally professional and formal. In contrast, tattoos cannot be easily removed and are intended to be permanent, which is a greater violation to the traditional professional or formal work attire.

Based on stigma theory (Link & Phelan, 2001), visible tattoos can be considered a socially salient attribute that is noticed and distinguishes those with visible tattoos from others. This distinction can trigger observers to associate stereotypes with visibly tattooed individuals, which in turn, can lead to differential treatment (Link & Phelan, 2001). However, considering expectancy violations theory (Burgoon, 2015; Burgoon & Hale, 1988), this socially salient difference, or violation of expectations, can be either negative or positive. Observers perceive negative expectancy violations unfavourably and positive expectancy violations favourably and then react accordingly. As such, I combine stigma and expectancy violations theories to describe

[3] The fact that so many people with tattoos choose to keep them hidden may tell us a lot about their experiences and expectations (i.e., their resulting fear of discrimination).

the process of seeing a visibly tattooed colleague, making sense of this, and the subsequent treatment towards tattooed colleagues.

The process (which I explain in greater depth below) is that visible tattoos are not expected (expectancy violation), thus are noticed by observers (arousal-distraction in expectancy violations theory; labelling differences in stigma theory), which triggers the observer to try to make sense of the visible tattoos (interpretation-evaluation in expectancy violations theory) and assign stereotypes to indicate meaning (associating attributes in stigma theory). The meaning is either negative or positive (violation valence in expectancy violations theory) which is determined during sensemaking by taking into consideration the nature of the violation and the violator (expectancy violations theory), which results in observer behaviours towards this person (stigma theory). Following stigma theory, the behaviours would involve separation and discrimination; however, considering expectancy violations theory, I extend this to positive behaviours as well, such as inclusion and interpersonal fairness, for violations that are interpreted as positive.

First, tattoos are a socially salient violation of expectations. Tattoos are becoming more common–the percentage of the United States population with tattoos increased from 21% in 2012 to 30% in 2019 (Jackson, 2019)–but are still not the norm as evidenced by two factors. (a) Only one third of the United States population is currently tattooed (Schaeffer & Dinesh, 2023), and (b) many of those with tattoos choose non-visible spots or keep their tattoos hidden (Heimlich, 2010; Narrative Research, 2024). Arousal-distraction in expectancy violations theory indicates that violations of expectations are distracting and draw observers' attention because people notice and attend to stimuli that are different from the norm. By drawing observers' attention, visible tattoos affect social perceptions and interactions (Sanders, 1988). In the

employment context, visible tattoos are not the norm and thus attract attention and influence observers' perceptions of, and interactions with, tattooed workers; this can even occur in pre-employment hiring contexts. Even young adults, who are more likely to be accepting of tattoos compared to older adults (e.g., Zestcott et al., 2018), report choosing not to disclose that they have tattoos to maintain a professional image and reputation at work (Foulke & Romo, 2021), emphasizing the pervasiveness of tattoos being unexpected in the workplace.

Second, interpretation-evaluation appraisal in expectancy violations theory is the sensemaking process that observers engage in to make sense of, and assign meaning to, the expectancy violation. When an observer sees a visible tattoo at work, they will focus on the tattoo and go through the process of assigning meaning to the violation. The meaning assigned to this violation will be the observers' perceptions of the tattooed individuals' characteristics. Considering stigma theory, this is when observers assign stereotypes to the tattooed person to signify their differences. Observers draw from cultural stereotypes of tattooed individuals during this process. Relevant stereotypes include those that are commonly associated with stigmatized characteristics (i.e., context-free stereotypes), such as perceptions of competence and trustworthiness. Perceived competence includes perceptions of the extent to which one is capable (Fiske, 2018), while perceived trustworthiness is the extent to which one is perceived as a credible source of information (Ohanian, 1990).

There are also tattoo-specific stereotypes, such as perceptions of artisticness and riskiness. Perceived artisticness refers to perceiving someone as being creative and artsy, and perceived riskiness refers to perceptions that one is dangerous and irresponsible. All of these stereotypes have been associated with observer perceptions of tattooed individuals, with findings showing that tattooed individuals are perceived as less competent (e.g., Henle et al., 2022;

Zestcott et al., 2017), less trustworthy (e.g., Timming & Perrett, 2017), and riskier and more artistic (e.g., Ruggs & Hebl, 2022). As such, these stereotypes are likely to be included in observers' sensemaking and assigning meaning to the visible tattoo expectancy violation.

Third, these stereotypes create separation between the observer and tattooed person, and observers behave accordingly based on the elicited stereotypes. With stigma theory, observers would be expected to behave in discriminatory ways towards those with visible tattoos. However, based on expectancy violations theory, the violation can be perceived as either negative or positive, depending on the appraisal process and aspects of the violator. In the case of tattooed persons, tattoos can facilitate social interactions that are either negative and stigmatizing or positive and approving (Irwin, 2003; Sanders, 1988). As such, I extend the outcomes of stigma theory to also examine positive behaviours or responses, and propose that visible tattoos in the workplace can be assigned negative or positive valence depending on their content. For the purposes of my research, I focus on two broad categories of tattoo content, namely dark and light. Dark tattoo content includes tattoos that are considered intimidating, rebellious, deviant, and/or threatening, while light tattoo content includes tattoos that are friendly, happy, cheerful and/or innocent (Tews et al., 2020). In an exploratory analysis, tattoos with masculine content, which aligns with the dark category, were associated with observers assigning greater negative meaning, while feminine tattoos aligning with light content, were associated with positive meaning (Arndt & Glassman, 2012).

Taken together, I propose that visible tattoos in the workplace will (1) attract observers' attention, (2) facilitate sensemaking regarding the meaning of the tattoos, which (3) will be either negative or positive, depending on whether the tattoo content is dark or light, respectively. The outcome of this process for observers will largely determine how observers perceive and behave

towards tattooed colleagues. The resulting treatment of tattooed colleagues by observers is important to understand not only for tattooed workers, but also for broader stigmatized identities and diversity in the workplace.

Dark Tattoo Content as a Negative Expectancy Violation

Dark tattoo content includes tattoos that are considered intimidating, rebellious, deviant, and/or threatening (Tews et al., 2020). Based on expectancy violations theory, dark tattoo content can be considered a negative expectancy violation eliciting negative observer reactions, such as separation and discrimination as described in stigma theory. The presence of the tattoo itself initiates the arousal-distraction for the observer because visible tattoos are not the norm. In the interpretation-evaluation appraisal process, the observer will make sense of the expectancy violation by drawing from the stereotypes they hold of tattooed individuals, making inferences about the tattooed colleagues' characteristics.

During the appraisal process, observers will assign a valence, negative or positive, based on the meaning they assign to the expectancy violation. Due to the intimidating and threatening nature of the dark tattoos, observers will consider the tattoos as a negative expectancy violation. As such, this will elicit negative stereotypes, such as observers perceiving colleagues with dark tattoo content as less competent, trustworthy, and artistic, and more risky. Those with dark tattoo content are typically perceived negatively; for example, those with violent tattoos are rated lower on trustworthiness, compared to other types of content, such as nature tattoos (Timming & Perrett, 2017). These negative perceptions due to dark tattoo content could facilitate negative interactions and adverse outcomes for tattooed individuals.

Considering stigma theory, I propose these negative perceptions will subsequently result in observers engaging in negative behaviour towards tattooed colleagues with dark tattoo

content, particularly discriminatory behaviours. In the workplace, starting with selection of job applicants through to on-the-job treatment, people with dark tattoo content experience disadvantages. In the selection process, dark tattoo content is a liability for tattooed job applicants: Job applicants with dark content visible tattoos are less likely to be hired than those with no tattoos or those with light content visible tattoos (Henle et al., 2022). For tattooed workers themselves who were already employed at an organization, dark tattoo content is significantly related to their own perceptions of greater discrimination and less fair interpersonal treatment from supervisors (Tews & Stafford, 2020b). For my research, I focus on subtle discrimination which involves discrete, often unintentional, negative behaviours directed at another person (Jones et al., 2016). For example, observers might perceive colleagues with intimidating (i.e., dark) tattoos negatively and therefore disregard their ideas and avoid them at work.

Based on theory and empirical findings, I propose that observers will perceive and treat their colleagues with dark content visible tattoos more negatively than those with light content or no tattoos.

Hypothesis 1: There will be greater subtle discrimination towards workers with dark content tattoos than workers with (a) light content tattoos or (b) no tattoos.

Hypothesis 2: Workers with dark content tattoos will be perceived more negatively (i.e., rated lower on perceived competence, trustworthiness, and artisticness, and higher on perceived riskiness) compared to workers with (a) light content tattoos or (b) no tattoos.

Hypothesis 3: The indirect effects dark tattoo content on subtle discrimination will be mediated by perceived (a) competence, (b) trustworthiness, (c) artisticness, and (d) riskiness.

Light Tattoo Content as a Positive Expectancy Violation

Light tattoo content includes tattoos that are seen as friendly, happy, cheerful and/or innocent (Tews et al., 2020). Again, having a visible tattoo itself is a violation of expectations

and will be noticed as a difference and will trigger the arousal-distraction of observers. During the interpretation-evaluation appraisal process, observers will try to make sense of and assign meaning to the expectancy violation. Images that are considered light tattoo content contrast with negative stereotypes associated with tattoos and assigned to tattooed individuals. Images that are cheerful and innocent do not align with the perceptions that tattoos are deviant and for criminals—a common stereotype. As such, light tattoo content could elicit more positive reactions from observers. For example, those with nature tattoos have been rated higher on trustworthiness, compared to other types of content, such as violent tattoos (Timming & Perrett, 2017). I propose that light tattoo content will be a positive expectancy violation and therefore observers will have positive perceptions of tattooed colleagues with light tattoo content which can facilitate positive interactions and outcomes.

For the interpretation-evaluation sensemaking process, observers, drawing on stereotypes, will assign positive characteristics, namely perceiving colleagues with light tattoo content as more competent, trustworthy, artistic, and less risky. In the workplace, people hold more positive perceptions of tattooed workers with light tattoo content compared to those with dark tattoo content. For example, job applicants with light tattoos are rated higher on job suitability (Burgess & Clark, 2010) and are perceived as warmer (Henle et al., 2022) than job applicants with dark tattoos. Similarly, salespeople with light tattoos are perceived as more trustworthy than those with dark tattoos (Arndt & Glassman 2012). Further, there are some cases in which those with tattoos are perceived more positively than those without tattoos: Those with visible neutral tattoos are perceived positively, namely as more artistic, compared to those with no tattoos (Ruggs & Hebl, 2022). Given this positive finding with neutral content, we might expect this to be even stronger with light tattoo content due to the friendly, cheerful nature. As an

example, mental health professionals with light tattoo content were rated as more interesting than those with no tattoos, and even those with a more provocative tattoos were perceived as more competent, confident, and likeable than those with no tattoos (Zidenberg et al., 2022).

Extending stigma theory and considering expectancy violations theory, I suggest that these positive perceptions will subsequently result in positive behaviours from observers towards colleagues with light tattoo content, namely respectful behaviours. For my research, I focus on interpersonal fairness behaviours, which involve being respectful and offering polite treatment to others (Colquitt & Rodell, 2015). As an example, observers of colleagues with visible cheerful (i.e., light) tattoos might perceive them positively thus be more likely to consider their viewpoint in meetings and communicate in a friendly tone.

Based on the theorizing and empirical findings, I propose that observers will perceive and treat their colleagues with light content visible tattoos more positively than those with dark content or no tattoos.

> ***Hypothesis 4***: There will be greater interpersonal fairness towards workers with light content tattoos than workers with (a) dark content tattoos or (b) no tattoos.
>
> ***Hypothesis 5***: Workers with light content tattoos will be perceived more positively (i.e., rated higher on perceived competence, trustworthiness, and artisticness, and lower on riskiness) compared to workers with (a) dark content tattoos or (b) no tattoos.
>
> ***Hypothesis 6***: The indirect effects of light tattoo content on interpersonal fairness will be mediated by perceived (a) competence, (b) trustworthiness, (c) artisticness, and (d) riskiness.

Hierarchical Position as a Moderator

Research on tattoos in the workplace has mostly focused on job applicants (e.g., Henle et al., 2022; Timming et al., 2017) or general employees (e.g., French et al., 2019; Tews & Stafford, 2019, 2020b). When different job positions are discussed, it is typically regarding customer-facing versus non-customer facing roles (e.g., Efthymiou, 2018; Tetteh et al., 2022; Tews &

Stafford, 2020a; Timming et al., 2017). As such, the literature has not examined hierarchical positions within the workplace to see if there are differences between employees and supervisors or managers. Only two studies (Henle et al., 2022; Tews & Stafford, 2020a) examine hiring for a supervisor or manager position; however, neither have comparison conditions to other hierarchical levels in the organization. As such, we do not know if the findings would be the same for other positions, such as an employee or higher-level manager.

On the one hand, having visible tattoos could be a violation of what we expect based on the prototypical leader (van Knippenberg et al., 2004). We might also expect that leaders are held to a higher standard and therefore experience more stigma. Drawing from implicit leadership theory, we know that people have ideas of what a prototypical leader is in terms of prototypical attributes, behaviours, appearance, and leaders that deviate from this could elicit negative evaluations from observers. Having a more professional or formal appearance is associated with a higher status, or position, in the organizational hierarchy (Bailey et al., 2022), and perceived as more prototypical for a leader (Maran et al., 2021). Tattooed workers are perceived as less professional than those without tattoos (Verissimo et al., 2016; Zidenberg et al., 2022). Therefore, tattoos are likely to elicit worse reactions from observers when on someone with a higher position due to the incongruence with the prototypical leader appearance. This perspective is supported by empirical findings of stigma towards leaders based on aspects of appearance (e.g., weight; Henderson et al., 2022) and identity (e.g., transgender identity; Adams & Webster, 2017).

On the other hand, the social standing resulting from occupying a higher-level position in the organizational hierarchy can serve as a protective factor from negative perceptions and treatment. Supporting this, stigma theory suggests that stigma occurs from a position of influence

over those being stigmatized (Link & Phelan, 2001), and expectancy violations theory suggests that violations are perceived more favourably when the violator is of higher status or power (Burgoon, 2015; Burgoon & Hale, 1988). And for those with higher status, violating norms is a sign of their status and power by showing that they do not fear negative repercussions of violating social norms (Maran et al., 2021). As such, based on theory, we might expect that leaders with tattoos are perceived similarly to, or more favourably than, non-leaders with tattoos.

In my research, I include three hierarchical levels to examine if there are any differences in perceptions of tattooed colleagues depending on the hierarchical position they occupy in relation to the observer, namely whether the tattooed worker is a coworker, supervisor, or supervisor's supervisor. This research is exploratory given the contradictory theoretical explanations, and as such, I do not include specific hypotheses but rather a research question.

> ***Research Question 1***: Will hierarchical position moderate the indirect effects of tattoo content on (a) subtle discrimination and (b) interpersonal fairness?

Gender as a Moderator

Social role and role congruity theories (Eagly, 1987; Eagly & Karau, 2002) can provide insights into how gender of the tattooed person may play a role in how tattooed colleagues are perceived. Tattoos themselves are perceived as more masculine; therefore, based on social role and role congruity theories (Eagly, 1987; Eagly & Karau, 2002), we might expect women with tattoos to be further discriminated against because tattoos are perceived as incongruent with femininity. Taking tattoo content into consideration, dark tattoo content is perceived as more masculine whereas light tattoo content is perceived as more feminine. As such, we might expect different results depending on the (in)congruence of the gender of the tattooed person and the tattoo content. Specifically, workers with dark tattoo content might experience greater subtle

discrimination if they are women. In contrast, workers with light tattoo content might experience less interpersonal fairness if they are men.

Empirical examinations of gender as a moderator of the relationship between tattoo presence and observer perceptions have received mixed results. For hiring decisions, in some cases women with tattoos are perceived to be more suitable for the job than men with tattoos (e.g., Burgess & Clark, 2010), while in other cases men with tattoos are rated more positively than women with tattoos (e.g., Tetteh et al., 2022). On-the-job perceptions of tattooed workers are similarly mixed. For example, customers are more likely to spread negative comments about tattooed men servers compared to tattooed women servers (Ozanne et al., 2019). There are no differences between men and women when it comes to tattoo status and unwanted sexual attention at work (Tews, Stafford, & Jolly, 2020). Providing more nuance, Hauke-Forman et al. (2021) found no significant interactions of tattoo status and gender for observer perceptions of friendliness, likability, and competence; however, there were significant interaction effects for observer perceptions of trustworthiness, assertiveness, threat, and respect. Specifically, the effects of tattoo status on perceptions of workers were significant only for men and not women, with tattooed men seen as less trustworthy, more assertive and threatening, and more respected compared to non-tattooed men.

The role of gender as a moderator in perceiving and interacting with tattooed workers is by no means clear. On the one hand, social role and role congruity theories (Eagly, 1987; Eagly & Karau, 2002) provide specific predictions for gender as a moderator. On the other hand, empirical findings show limited support for theoretical predictions. See Table 2.1 for an overview of research examining gender as a moderator of tattooed workers and observer perceptions, which highlights the mixed and sometimes contradictory findings.

Based on the lack of support for the theoretical predictions, I analyze gender as a moderator; however, I leave this as another exploratory research question instead of specific directional hypotheses.

Research Question 2: Will gender moderate the indirect effects of tattoo content on (a) subtle discrimination and (b) interpersonal fairness?

Summary

Using expectancy violations theory (Burgoon, 2015; Burgoon & Hale, 1988) and stigma theory (Link & Phelan, 2001) as guides, I propose that the nature of the tattoo content (dark vs. light) will predict observer perceptions and treatment of tattooed colleagues. First, I predict that colleagues with dark tattoo content will be perceived more negatively, i.e., less competent, trustworthy, artistic, and more risky, and subsequently treated more negatively, namely with more subtle discrimination behaviours by observers. Second, I predict that colleagues with light tattoo content will be perceived more positively, i.e., more competent, trustworthy, artistic, and less risky, and subsequently treated more positively, with more interpersonal fairness behaviours by observers. Third, I explore the moderating roles of hierarchical position and gender on the indirect effects of tattoo content on treatment through the mediating role of context-free stereotypes (i.e., perceived competence and trustworthiness) and tattoo-specific stereotypes (i.e., perceived artisticness and riskiness). I test all of my hypotheses and research questions in an experimental study using a vignette approach in Study 1. In doing so, I use both self-report and external ratings of the outcomes (namely, subtle discrimination and interpersonal fairness) to reduce possible threats to construct validity through common method bias.

Table 2.1
Gender as a Moderator

Study Authors	Study Prediction	What would Social Role and Role Congruity Theories Predict?	Study Results	Support for Theory?
Burgess & Clark (2010)	No specific gender predictions; however, does discuss how tattoos are associated with masculinity – especially traditional bold tattoos – although this may be changing with more women requesting feminine tattoos (i.e., cute tattoos).	Based on congruence: Gender and design may interact, such that greater negative perceptions when incongruent.	No interaction of tattoo and gender. Those with bold tattoos were perceived more negatively regardless of gender. And no gender differences for cute tattoo either.	Not supported
Arndt & Glassman (2012)	Tattooed salespeople will be rated lower with gender incongruent designs compared to gender congruent designs.	Gendered content with feminine and masculine tattoos: Gender and tattoo content incongruence would lead to lower ratings on trust and willingness to work with the salesperson.	Customers more likely to trust and more willing to work with saleswomen with feminine tattoos – effects diminished for salesmen because feminine tattoos are gender incongruent.	Supported
Westerfield et al. (2012)	None	Tattoos are perceived as masculine; thus, tattooed women would likely be rated lower on professionalism than tattooed men.	Women with tattoos were perceived as less professional than men with tattoos.	Supported
Baumann et al. (2016)	Tattoos and gender will interact: Tattooed women will be more disadvantaged than tattooed men.	Tattoos are perceived as masculine; thus, tattooed women would be further disadvantaged because tattoos are perceived as incongruent with femininity.	There was an interaction of gender and tattoo with women being further disadvantaged having a tattoo.	Supported
Timming (2017)	Based on prior empirical findings: Tattooed women would be viewed more negatively than tattooed men.	Tattoos are perceived as masculine therefore tattooed women would be rated lower on employability than tattooed men.	In fine dining, tattooed men rated higher on employability than tattooed women. In nightclub, tattooed men rated lower on employability than tattooed women.	Partially supported
Ozanne et al. (2019)	Customers will be more likely to share negative reviews when a tattooed woman server makes mistakes compared to tattooed man server.	Tattoos are seen as agentic so align with perceptions of masculinity which suggests tattooed women tattoos would receive less favourable treatment because tattoos go against gender expectations.	Tattooed men servers caused more negative reviews than tattooed women servers.	Not supported

Study Authors	Study Prediction	What would Social Role and Role Congruity Theories Predict?	Study Results	Support for Theory?
Tews & Stafford (2020a)	Based on gender stereotypes: Predict that tattoos will create a greater disadvantage for women than men.	Based on congruence: Tattooed women would be rated lower on hiring than tattooed men because tattoos are perceived as masculine therefore incongruent with femininity.	No gender differences in Study 1; Women preferred over men in Study 2	Not supported
Tews, Stafford, & Jolly (2020)	Did not make predictions. Initially controlled for gender because women more likely to experience unwanted sexual attention. But did conduct post hoc analysis for gender interactions.	Considering tattoos are perceived as masculine: Gender would interact with tattoos such that women with tattoos would receive more unwanted sexual attention than men.	Gender did not interact with having a visible tattoo for unwanted sexual attention.	Not supported
Tews, Stafford, & Kudler (2020)	Based on gender stereotypes: Dark tattoos would be less detrimental for men, while light tattoos would be less detrimental for women.	Dark tattoos are perceived as more masculine (e.g., reflect agentic qualities) so would be less detrimental for men, while light tattoos are perceived as more feminine (e.g., reflect more communal qualities) so would be less detrimental for women.	There was no interaction of tattoo content and gender.	Not supported
Hauke-Forman et al. (2021)	Exploratory	Tattoos are perceived as masculine; thus, tattooed women would be rated more negatively than tattooed men because tattoos are perceived as incongruent with femininity.	Men with tattoos perceived more harshly than women counterparts.	Not supported
Ruggs & Hebl (2022)	None – exploratory because of mixed results in the literature.	Based on gender congruence, we could predict that tattooed women would be perceived more negatively than tattooed men.	Found no gender interaction.	Not supported
Tetteh et al. (2022)	Based on prior empirical findings: Visible tattoos would cause greater prejudice for men compared to women.	Congruence with gender stereotypes would predict that visible tattoos would cause greater prejudice for women than men.	Tattooed men rated higher on employability than tattooed women.	Supported

References

Adams, G. A., & Webster, J. R. (2017). When leaders are not who they appear: The effects of leader disclosure of a concealable stigma on follower reactions. *Journal of Applied Social Psychology*, *47*(12), 649-664.

Antonellis Jr, P. J., Berry, G., & Silsbee, R. (2017). Employment interview screening: Is the ink worth it? *Global Journal of Human Resource Management*, *5*(2), 38-53.

Antonellis Jr, P., & Silsbee, R. (2018). Employment interview screening: Time to face the ink. *Journal of Business & Economic Policy*, *5*(4), 44-53.

Arndt, A. D., & Glassman, M. (2012). What tattoos tell customers about salespeople: The role of gender norms. *Marketing Management Journal*, *22*(1), 50-65.

Bailey, E. R., Horton, C. B., & Galinsky, A. D. (2022). Enclothed harmony or enclothed dissonance? The effect of attire on the authenticity, power, and engagement of remote workers. *Academy of Management Discoveries*, *8*(3), 341-356.

Baumann, C., Timming, A. R., & Gollan, P. J. (2016). Taboo tattoos? A study of the gendered effects of body art on consumers' attitudes toward visibly tattooed front line staff. *Journal of Retailing and Consumer Services, 29*, 31-39.

Bekhor, P. S., Bekhor, L., & Gandrabur, M. (1995). Employer attitudes toward persons with visible tattoos. *Australasian Journal of Dermatology*, *36*(2), 75-77.

Brallier, S. A., Maguire, K. A., Smith, D. A., & Palm, L. J. (2011). Visible tattoos and employment in the restaurant service industry. *International Journal of Business and Social Science*, *2*(6), 72-76.

Burgess, M., & Clark, L. (2010). Do the "savage origins" of tattoos cast a prejudicial shadow on contemporary tattooed individuals? *Journal of Applied Social Psychology*, *40*(3), 746-764.

Burgoon, J. K. (2015). Expectancy violations theory. In Berger, C.R., Roloff, M.E., Wilson, Dillard, J.P., Caughlin, J., & Solomon, D. (Eds.), *The international encyclopedia of interpersonal communication*. Wiley.

Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communications Monographs, 55*(1), 58-79.

Burgoon, J. K., Manusov, V., & Guerrero, L. K. (2022). *Nonverbal communication* (2nd ed.). Routledge.

Colquitt, J. A., & Rodell, J. B. (2015). Measuring justice and fairness. In R. Cropanzano & M. L. Ambrose (Eds.). *The Oxford handbook of justice in the workplace* (pp. 187-202). Oxford University Press.

Cortini, M., Bortune, R., & Fantinelli, S. (2019). Personnel selection and body art. A mix-method study on tattooed job candidates. *International Journal of Scientific and Technological Research, 8*(9), 1966-1970.

Dean, D. H. (2010). Consumer perceptions of visible tattoos on service personnel. *Managing Service Quality: An International Journal*, *20*(3), 294-308.

Dean, D. H. (2011). Young adult perception of visible tattoos on a white-collar service provider. *Young Consumers*, *12*(3), 254-264.

Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Lawrence Erlbaum.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*(3), 573.

Efthymiou, L. (2018). Worker body-art in upper-market hotels: Neither accepted, nor prohibited. *International Journal of Hospitality Management*, *74*, 99-108.

Efthymiou, L., Orphanidou, Y., & Karayiannis, A. (2023). The Impact of Workers' Tattoos and Piercings on Employment: Suggestions for Pragmatic Career Planning. In A. Broadbridge (Ed.). *The Emerald Handbook of Appearance in the Workplace* (pp. 301-316). Emerald Publishing Limited.

Fiske, S. T. (2018). Stereotype content: Warmth and competence endure. *Current Directions in Psychological Science*, *27*(2), 67-73.

Foulke, M., & Romo, L. K. (2021). An examination of how young adults manage verbal disclosure of their tattoo(s). *Qualitative Research Reports in Communication, 22*(1), 39-46.

French, M. T., Maclean, J. C., Robins, P. K., Sayed, B., & Shiferaw, L. (2016). Tattoos, employment, and labor market earnings: Is there a link in the ink? *Southern Economic Journal*, *82*(4), 1212-1246.

French, M. T., Mortensen, K., & Timming, A. R. (2019). Are tattoos associated with employment and wage discrimination? Analyzing the relationships between body art and labor market outcomes. *Human Relations*, *72*(5), 962-987.

Hauke-Forman, N., Methner, N., & Bruckmüller, S. (2021). Assertive, but less competent and trustworthy? Perception of police officers with tattoos and piercings. *Journal of Police and Criminal Psychology*, *36*(3), 523-536.

Heimlich, R. (2010, March 24). *Tattoo Taboo*. Pew Research Center. https://www.pewresearch.org/short-reads/2010/03/24/tattoo-taboo/

Henderson, A. A., Matthews, R. A., McKersie, S. J., & Whitman, M. V. (2022). Leading when overweight: The influence of supervisor body weight on subordinates' perceptions and citizenship behaviors. *Journal of Business and Psychology*, *37,* 615-631.

Henle, C. A., Shore, T. H., Murphy, K. R., & Marshall, A. D. (2022). Visible tattoos as a source of employment discrimination among female applicants for a supervisory position. *Journal of Business and Psychology*, *37*, 107-125.

Irwin, K. (2003). Saints and sinners: Elite tattoo collectors and tattooists as positive and negative deviants. *Sociological Spectrum*, *23*(1), 27-57.

Jackson, C. (2019, August 29). *More Americans Have Tattoos Today than Seven Years Ago*. Ipsos. https://www.ipsos.com/en-us/news-polls/more-americans-have-tattoos-today

Jones, K. P., Peddie, C. I., Gilrane, V. L., King, E. B., & Gray, A. L. (2016). Not so subtle: A meta-analytic investigation of the correlates of subtle and overt discrimination. *Journal of Management, 42(6),* 1588-1613.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual review of Sociology*, *27*(1), 363-385.

Maran, T., Liegl, S., Moder, S., Kraus, S., & Furtner, M. (2021). Clothes make the leader! How leaders can use attire to impact followers' perceptions of charisma and approval. *Journal of Business Research*, *124*, 86-99.

Miller, B. K., Nicols, K. M., & Eure, J. (2009). Body art in the workplace: Piercing the prejudice? *Personnel Review*, *38*(6), 621-640.

Narrative Research. (2024, March 21). *One third of Canadians have tattoos, and most have no regrets about getting them.* https://narrativeresearch.ca/one-third-of-canadians-have-tattoos-and-most-have-no-regrets-about-getting-them/

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, *19*(3), 39-52.

Ozanne, M., Tews, M. J., & Mattila, A. S. (2019). Are tattoos still a taboo? The effect of employee tattoos on customers' service failure perceptions. *International Journal of Contemporary Hospitality Management*, *31*(2), 874-889.

Ruggs, E. N., & Hebl, M. R. (2022). Do employees' tattoos leave a mark on customers' reactions to products and organizations? *Journal of Organizational Behavior, 43*(6), 965-982.

Sanders, C. R. (1988). Marks of mischief: Becoming and being tattooed. *Journal of Contemporary Ethnography*, *16*(4), 395-432.

Schaeffer, K., & Dinesh, S. (2023, August 15). *32% of Americans have a tattoo, including 22% who have more than one*. Pew Research Center. https://www.pewresearch.org/short-reads/2023/08/15/32-of-americans-have-a-tattoo-including-22-who-have-more-than-one/#:~:text=Gender%3A%2038%25%20of%20women%20have,and%2014%25%20of%20Asian%20Americans

Tetteh, D. L. K., Annor, F., & Abdul-Nasiru, I. (2022). Do visible body modifications influence job applicants' perceived employability in Ghana? A quasi-experimental study. *Ghana Social Science Journal*, *19*(2), 1-18.

Tews, M. J., Stafford, K., & Jolly, P. M. (2020). An unintended consequence? Examining the relationship between visible tattoos and unwanted sexual attention. *Journal of Management & Organization*, *26*(2), 152-167.

Tews, M. J., Stafford, K., & Kudler, E. P. (2020). The influence of tattoo content on perceptions of employment suitability across the generational divide. *Journal of Personnel Psychology, 19*(1), 4-13.

Tews, M. J., & Stafford, K. (2019). The relationship between tattoos and employee workplace deviance. *Journal of Hospitality & Tourism Research*, *43*(7), 1025-1043.

Tews, M. J., & Stafford, K. (2020a). Tattoos and perceptions of employment suitability in the hospitality industry. *Journal of Human Resources in Hospitality & Tourism*, *19*(2), 148-167.

Tews, M. J., & Stafford, K. (2020b). Tattoos and unfavorable treatment among employees in the hospitality industry. *International Journal of Contemporary Hospitality Management*, *32*(5), 1925-1940.

Timming, A. R. (2015). Visible tattoos in the service sector: a new challenge to recruitment and selection. *Work, Employment and Society*, *29*(1), 60-78.

Timming, A. R. (2017). Body art as branded labour: At the intersection of employee selection and relationship marketing. *Human Relations*, *70*(9), 1041-1063.

Timming, A. R., Nickson, D., Re, D., & Perrett, D. (2017). What do you think of my ink? Assessing the effects of body art on employment chances. *Human Resource Management*, *56*(1), 133-149.

Timming, A. R., & Perrett, D. I. (2017). An experimental study of the effects of tattoo genre on perceived trustworthiness: Not all tattoos are created equal. *Journal of Trust Research*, *7*(2), 115-128.

Uzunogullari, S., & Brown, A. E. (2021). Negotiable bodies: employer perceptions of visible body modifications. *Current Issues in Tourism*, *24*(10), 1451-1464.

van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly*, *15*(6), 825-856.

Verissimo, A., Tolle, S. L., McCombs, G., & Arndt, A. (2016). Assessing dental clients' perceptions of dental hygienists with visible tattoos. *Canadian Journal of Dental Hygiene*, *50*(3), 109-115.

Westerfield, H. V., Stafford, A. B., Speroni, K. G., & Daniel, M. G. (2012). Patients' perceptions of patient care providers with tattoos and/or body piercings. *JONA: The Journal of Nursing Administration, 42*(3), 160-164.

Wood, B., & Broadbridge, A. (2023). A Tattooed Workforce–Still a Liability? In A. Broadbridge (Ed.). *The Emerald Handbook of Appearance in the Workplace* (pp. 317-330). Emerald Publishing Limited.

Zestcott, C. A., Tompkins, T. L., Kozak Williams, M., Livesay, K., & Chan, K. L. (2018). What do you think about ink? An examination of implicit and explicit attitudes toward tattooed individuals. *The Journal of Social Psychology*, *158*(1), 7-22.

Zidenberg, A. M., Dutrisac, S., & Olver, M. (2022). "No ragrets": Public perceptions of tattooed mental health professionals. *Professional Psychology: Research and Practice*, *53*(3), 304-312.

Chapter 3:

Study 1

Study 1 is pre-registered[4] experimental study using a vignette and survey conducted with a sample of adults residing in the United States recruited through Prolific.com, an online data collection platform. The purpose of this study is to test the hypotheses for the direct and indirect effects of dark and light tattoo content on observer perceptions, namely perceived competence, trustworthiness, artisticness, and riskiness, and treatment, namely subtle discrimination and interpersonal fairness, of tattooed colleagues. In addition, this study explores my research questions regarding whether perceptions and treatment of tattooed colleagues differs by the hierarchical position of the tattooed colleague in relation to the observer, and whether gender of the tattooed colleague plays a role. Given the aims of Study 1, I created a scenario with an image of a fictional worker and a written description which together manipulate tattoo content, hierarchical position, and gender of the fictional worker.

Prior to Study 1, I conducted two pilot studies to test the images used in the vignette. First, I tested tattoo images for dark and light content (i.e., construct validity), and images of women and men to ensure the woman and man chosen were perceived as similar in appearance. Second, I tested the extent to which the manipulated images of the tattoos on the woman and man were perceived to be realistic (i.e., ecological validity).

Study 1 Pilot 1

For Pilot Study 1, I tested which tattoo images to use based on which was perceived as most dark in content and which was perceived as most light in content. In addition, I tested

[4] https://osf.io/nrb89/?view_only=d1537f30ceab4c6ca424cfe2387af486

images of women and men to identify a woman and a man that were perceived to be similar in appearance.

I chose tattoo images from the InkHunter mobile app, with five intended to represent dark tattoo content and five intended to represent light tattoo content (see Appendix A1 for the tattoo images tested). For the women and men, I chose stock images from Adobe Stock (https://stock.adobe.com/ca/) of women and men with their arms crossed and wearing white t-shirts (see Appendix A2 for the stock images tested).

Participants

I recruited 135 undergraduate business students to complete an online survey for extra course credit towards the course of their choosing. The final sample size was 122 after removing those who chose to withdraw their data (n = 4) and those who failed one or more attention checks (n = 9). Among the participants, 67 identified as women, 54 identified as men, and one identified as other. Participants had a mean age of 19.61 years (SD = 1.22).

Procedure

Each participant was presented with 10 tattoo images and 25 woman-man pairs. The order of whether they first saw tattoo images or pairs, and the order in which tattoo images and pairs were presented, was randomized. For each tattoo image, participants were asked to rate the image on measures of dark and light content. For each woman-man pair, participants were asked to rate how similar they were in appearance. Finally, participants were asked to provide demographic information.

Measures

Dark and Light Tattoo Content. To measure tattoo content, I used Tews and Stafford's (2020) 14 item measure. Specifically, the following seven adjectives assessed dark tattoo

content: deviant, gothic, intimidating, masculine, rebellious, threatening, tough; and the following seven adjectives for light tattoo content: cheerful, feminine, friendly, happy, innocent, playful, wholesome. Participants were asked to rate how well each adjective, presented in a random order, described each image on a scale from 1 = *not well at all* to 5 = *extremely well*.

Similarity. To measure similarity of women and men in pairs, participants were asked to rate "How similar in appearance are the man and woman in this pair?" on a scale from 1 = *not at all similar* to 5 = *extremely similar*.

Analytic Procedures

The next step was to compute the mean scores for perceived darkness and perceived lightness of each tattoo image, which I used to identify the highest rated for dark tattoo content and highest rated for light tattoo content. However, for the light tattoo content, the highest rated was the butterfly image, which upon reflection, could be gender biased. As such, I chose a different image to represent light tattoo content (see below). I then conducted paired-samples t-tests to ensure the highest rated dark tattoo content image was perceived as more dark than light, and the chosen light tattoo content image was perceived as more light than dark. In addition, using paired-samples t-tests, I tested whether the chosen dark tattoo content image was perceived as significantly more dark than the next highest rated image, and whether the chosen light tattoo content image was perceived as significantly different in lightness compared to the highest rated light tattoo content image.

Results

For the dark tattoo content condition, I chose the skull and knife tattoo image (see Dark Image 1, Appendix A1) as it was rated highest on dark tattoo content ($M = 4.08$, $SD = .77$). This mean was significantly higher than the next highest rated ($M = 3.80$, $SD = .77$), $t(121) = 4.30$, $p <$

.001. To further ensure this image represented dark tattoo content, I compared the dark rating to the light rating for this image. The skull and knife image was rated as significantly more dark (M = 4.08, SD = .77) than light (M = 1.28, SD = .49), $t(121) = 31.66$, $p < .001$.

For the light tattoo content condition, I chose the rose and leaves tattoo image (M = 3.43, SD = .91; see Light Image 1, Appendix A1). It was not rated highest on light content; however, it was in the top three highest for light content. The highest rated for light tattoo content was a butterfly image (M = 3.61, SD = .77), and this was perceived as significantly more light than the rose and leaves image, $t(121) = 2.47$, $p = .007$. However, I chose the rose and leaves image because on reflection, it is less likely to be gender biased than the butterfly image. To ensure the chosen rose and leaves image represented light tattoo content, I compared the light rating to the dark rating for this image. The results showed that the rose and leaves image was rated significantly more light (M = 3.43, SD = .91) than dark (M = 1.56, SD = .57), $t(121) = 17.71$, $p < .001$.

For the woman-man pair, I chose the pair rated highest on perceived similarity in appearance. The pair with the highest rating of similarity had a mean of 3.19 (SD = 1.03). I conducted paired samples t-tests to determine if the mean for the pair rated most similar was significantly greater than the similarity ratings for other pairs, namely the next five highest rated pairs. Due to the number of t-tests, I used Bonferroni correction (i.e., .05/6 pairs) to indicate the p-value at which a comparison is significant. As such, I consider a p-value of less than .008 significant. The results of the paired samples t-tests show that the highest rated pair (M = 3.19, SD = 1.03) was perceived as significantly more similar in appearance than the next highest rated pair (M = 3.02, SD = 1.13), $t(121) = 1.53$, $p = .129$.

Discussion

Based on the results and considering the potential for gender bias, I chose the skull and knife image (see Dark Image 1, Appendix A1) to represent the dark tattoo content condition and the rose and leaves image (see Light Image 1, Appendix A1) to represent the light tattoo content condition. For the pairs, I chose the woman-man pair with the highest rating on perceived similarity in appearance. With the images chosen, I proceeded to the next step which was placing the tattoo images on the stock images of the woman and man and conducing the second pilot study to test how realistic (i.e., ecological validity) these manipulated images looked.

Study 1 Pilot 2

The goal of Pilot Study 2 was to test the selected tattoo images on the woman and man from the first pilot study. To create the manipulated images of interest, I used the InkHunter mobile app to place the tattoo images on the images of the woman and man. Each tattoo image was placed on the forearm in the same spot for each condition. In addition to these manipulated images, I also included stock images for a woman and a man with actual tattoos, and stock images for a woman and a man in which I placed a tattoo image on their forearm in a way that appeared fake using Adobe Photoshop (https://www.adobe.com/ca/products/photoshop.html); these were distractor images and were not used in analyses.

Participants

I recruited 201 participants from Prolific.com to complete an online survey. The final sample size was 196 after removing those who chose to withdraw their data (n = 4) and those who failed one or more attention checks (n = 1). Participants had a mean age of 41.13 years (SD = 13.30), with 138 identifying as women, 55 identifying as men, and three did not identify with the gender binary.

Procedure

Each participant was presented with a total of five images (see Appendix B for images), the order of which was randomized, namely one of the manipulated images, both actual tattoo images, and both distractor tattoo images. Participants were shown one image at a time and given the prompt "This tattoo looks…" and asked to rate the tattoos on six items – realistic, real, lifelike, fake, unrealistic, artificial – using a scale from 1 = *not at all* to 5 = *extremely*. After rating all five images, participants were asked demographic questions.

Analytic Procedures

I used SPSS version 28 to conduct manipulation checks to ensure construct validity. To test how realistic the tattoos appeared, I conducted paired samples t-tests to compare the manipulated images of interest to the images with actual tattoos on two variables, namely perceptions of realness (i.e., how realistic the tattoo looked) and perceptions of fakeness (i.e., how fake the tattoo looked). For the realness variable, I created a mean score on the three items: real, realistic, and lifelike. For fakeness variable, I created a mean score on the three items: fake, unrealistic, artificial. For the paired samples t-tests, I made eight comparisons, namely comparing each of the manipulated images of interest to the images with actual tattoos, of the same gender, on each of the two variables.

Results

I conducted paired samples t-tests with eight comparisons, and as such, the Bonferroni corrected significant *p*-value is below .006 (i.e., .05/8). The man with the light content tattoo was rated no differently than the man with the actual tattoo on realness ($t(47) = -2.16$, $p = .036$) or fakeness ($t(47) = 2.22$, $p = .031$). The man with the dark content tattoo was perceived as significantly lower on realness ($t(37) = -5.67$, $p < .001$) than the man with the actual tattoo, but

was rated no differently on fakeness ($t(37) = 2.82$, $p = .008$). The woman with the light content tattoo was rated no differently than the woman with the actual tattoo for realness ($t(54) = 1.00$, $p = .321$) or fakeness ($t(54) = 1.00$, $p = .322$). The woman with the dark content tattoo was rated the same as the woman with the actual tattoo for real ($t(54) = -1.67$, $p = .100$), but was rated as significantly more fake ($t(54) = 3.31$, $p = .002$). See Table 3.1 for means and standard deviations.

Table 3.1
Means and Standard Deviations: Study 1 Pilot Study 2

Gender	Tattoo	Rating	*M*	*SD*
Man	Light	Realness	2.50	1.17
		Fakeness	2.36	1.17
	Actual	Realness	2.88	1.03
		Fakeness	2.04	1.10
	Dark	Realness	2.13	.98
		Fakeness	2.25	.97
	Actual	Realness	3.02	.93
		Fakeness	1.66	.91
Woman	Light	Realness	2.84	.99
		Fakeness	1.84	.92
	Actual	Realness	2.71	1.10
		Fakeness	1.74	.81
	Dark	Realness	1.92	.77
		Fakeness	2.62	1.21
	Actual	Realness	2.12	.91
		Fakeness	2.12	.98

Discussion

There are two potentially problematic findings: (1) the man with the dark content tattoo was rated lower on realness than the man with the actual tattoo, and (2) the woman with the dark content tattoo was rated higher on fakeness than the woman with the actual tattoo. However, because neither the man nor woman with the dark content tattoo were significantly different on both realness and fakeness ratings, compared to the respective actual tattoo images, I proceeded with these images in Study 1.

Study 1

Method

Study 1 uses an experimental design with a vignette, namely a written description and accompanying image of a fictional worker in a 3 (tattoo content: no tattoo vs. dark content tattoo vs. light content tattoo) x 3 (hierarchical position: coworker vs. supervisor vs. supervisor's supervisor) x 2 (gender: woman vs. man) between-subjects design. After reading the information form and consenting to participate in the study, participants were randomly assigned to view one vignette, which contained an image of a fictitious worker (see Appendix C) with an accompanying written description (see below; also in Appendix D).

> *"Meet Alex Johnson, your coworker/direct supervisor/supervisor's supervisor. Alex is a professional with a calm demeanor, known for maintaining an organized workspace. Task-oriented and collaborative, she/he approaches assignments systematically and contributes thoughtfully in meetings. Recognized for her/his reliability, Alex is viewed as a dependable team member in the routine office environment.*
>
> *You have no personal relationship with Alex, but have worked with her/him for 6 months now. Alex is someone you see most days at work.*
>
> *Please take a moment to review this information about Alex as you will be asked a series of questions about her/him on the following pages."*

Participants were invited to review the information and told they would be asked questions regarding this worker. Participants were then presented with the survey. Participants were asked to complete measures for the stereotypes, namely perceived competence, trustworthiness, artisticness, and riskiness. Following these measures, participants were presented with a fictional email and asked to imagine that the worker from the vignette sent them this email, and they were asked to write an email in response as if they were writing to this worker as a colleague; these email responses were intended to capture the outcomes of subtle discrimination and interpersonal fairness. Participants were also asked to complete measures for the outcomes of subtle discrimination and interpersonal fairness. Manipulation checks for the gender and hierarchical position were included to ensure construct validity, and the survey items ended with demographic questions. Finally, participants were debriefed on the true purpose of the study because I did not initially disclose that the study was on reactions to tattoos to avoid creating a demand characteristic and ensure this information would not influence participants' responses to the survey items.

Participants

Participants were recruited from Prolific (https://www.prolific.com), an online platform for participant recruitment. A total of 630 participants from the United States were recruited to complete the survey. Each participant was randomly assigned to one of the conditions. The final sample was 455 after deleting 175 responses due to failing one or more manipulation checks. In this final sample, the average participant age was 38.18 years (*SD* = 11.48), they worked 37.02 hours per week on average (*SD* = 10.49), and 54.3% identified as women, 44.2% identified as men, and 1.5% as other. Among participants, 71.9% did not have tattoos, and they reported familiarity with tattoos on a 5-point scale with a mean of 3.19 (*SD* = 1.13).

Measures

See Appendix E for full list of measures and items used in Study 1. Unless otherwise stated, participants were asked how well the characteristics listed described the worker presented to them on a scale from 1 = *not well at all* to 5 = *extremely well*.

Perceived Competence. I measured perceived competence with Fiske's (2018) 6-item measure. Items are capable, competent, efficient, intelligent, self-assured, and skillful.

Perceived Trustworthiness. Perceived trustworthiness was assessed with Ohanian's (1990) 5-item measure. This measure is a 7-point semantic differentials scale (e.g., Untrustworthy/Trustworthy).

Perceived Riskiness. I used Ruggs and Hebl's (2022) perceived riskiness 4-item measure, namely risky, edgy, irresponsible, dangerous.

Perceived Artisticness. Perceived artisticness was measured with Ruggs and Hebl's (2022) 2-item measure, namely artistic and creative, to which I added 5 items (imaginative, aesthetic, innovative, inventive, original).

Externally-rated Subtle Discrimination and Interpersonal Fairness. I used an email writing task (Scanlon, 2025), for which participants were presented with a fictional email (see below) from the worker in the vignette and were asked to write a response.

> Good morning,
>
> I was wondering if you would be able to help me with a project I am working on? It would require meeting a few times over the coming weeks and putting together some documents that will be presented at my next meeting with the client. I will also need help getting through some of the transcripts from the most recent round of interviews.
>
> I realize you have a lot on your plate right now and that quarterly deadlines are approaching, but if you are able to provide assistance, it would be greatly helpful.
>
> Please let me know at your earliest convenience so we can set up a time to meet if need be.

Thank you,

Alex Johnson

Two RAs were trained to code the email responses. Specifically, I led them through an initial three-hour training including a presentation explaining the constructs with workplace examples followed by practicing sample emails together. For practicing, the three of us went through several emails together then they individually coded several and discussed their coding together while I answered any of their questions. After the initial training, each RA coded 60 emails on their own. When they finished that batch, we met again to discuss discrepancies in their coding and how to move forward with the remaining emails.

The trained RAs coded the email responses with four items representing subtle discrimination (i.e., hostile, rude, cold, condescending) and four items representing interpersonal fairness (i.e., polite, courteous, friendly, respectful). These items were coded on a scale from 1 = *not at all* to 7 = *extremely*. Inter-rater reliability was acceptable with average measure ICC [2] = .887 for subtle discrimination and average measure ICC [2] = .960 for interpersonal fairness. Example of email responses coded high on subtle discrimination are: “i will avail myself to help you with the project” and “Come by my desk and we'll talk.” Another example of high subtle discrimination is:

> Good Morning, I will not be able to help you with your project because I have my own assignments. Why do you think its appropriate for me to do your work so you can get credit for it. I really barely have time to complete my own work and can't possibly be able to assist you. In fact I am offended you asked me so consider this my two week notice. sincerely, woke 23 year old that has a poor work ethic and can't handle regular life stresses never mind anything extra.

An example email response coded high on interpersonal fairness is:

> Good morning! I can definitely help you with a project your working on! Please tell me the days of the weeks you'd like to meet together and I will fit it into my schedule. I'm available Tuesdays, Thursday and Fridays. So let me know if you want to schedule a meeting one of those days. I'm looking forward to working with you! Thank you so much!

And another example of high interpersonal fairness is:

> Alex,
>
> Hope you're doing well! Thanks for reaching out.
>
> I'm happy to help out. As of right now, my schedule is fairly flexible.
>
> I'd love to meet to discuss specifics and get a better estimate of the overall time commitment required. I have availability from 9:00 - 11:00 a.m. on Tuesday and Thursday. Let me know if you're free at any point during that window. Thank you!
>
> Best,
>
> [My name]

Self-report Subtle Discrimination. I measured subtle discrimination with items drawn from theory and previous measures (Jones, et al., 2016). Participants were asked to imagine they were assigned to work with the worker presented to them and respond to the items as they would behave in that situation. Items were rated from 1 = *strongly disagree* to 5 = *strongly agree*, with an example item being "I would ignore Alex's ideas."

Self-report Interpersonal Fairness. I measured expected interpersonal fair treatment with items drawn from previous measures of fairness (Colquitt, 2001; Colquitt & Rodell, 2015; Moorman, 1991). Participants were asked to respond to these items as if they had been asked to

work with the worker presented to them. Items were rated from 1 = *strongly disagree* to 5 = *strongly agree*. An example item is "I would treat Alex in a polite manner."

Control Variables. I included three control variables, namely participants' openness to experience, tattoo status, and tattoo familiarity. First, openness to experience is included as a control because people who are higher on openness to experience may be more accepting of tattoos, even though openness to experience was related to lower acceptance of working with a colleague with a tattoo and facial piercings in prior research (Miller et al., 2009). In addition, although not tattoos specifically, those higher on openness to experience perceive those with piercings more positively (more competent, trustworthy, and suitable for a job; McElroy et al., 2014). Openness to experience was measured with four items – e.g., "I have a vivid imagination" (1 = *very inaccurate*, 2 = *moderately inaccurate*, 3 = *neither inaccurate nor accurate*, 4 = *moderately accurate*, 5 = *very accurate*) – from the mini-IPIP (Donnellan et al., 2006).

Second, people with tattoos may be more accepting of others with tattoos, and some findings suggest that those with tattoos do not discriminate against tattooed job applicants whereas those without tattoos do discriminate (e.g., Burgess & Clark, 2010). However, there are mixed findings across studies on this topic, with other findings showing no differences whether or not participants have tattoos (e.g., Degelman & Price, 2002; Larsen et al., 2014). Participant tattoo status was measured as "Do you have any tattoos?" Third, tattoo familiarity provides more nuance beyond tattoo status, and was measured with one item asking, "How familiar are you with tattoos?" (1 = *not at all*, 2 = *slightly*, 3 = *moderately*, 4 = *very*, 5 = *extremely*).

In addition, each of these variables were significantly related to the variables of interest (see Table F2 in Appendix F). Specifically, participants' tattoo status was significantly related to externally-rated subtle discrimination (r = -.10*) and self-reported interpersonal fairness (r =

.10*), participants' tattoo familiarity was significantly related to perceived competence (r = .15**), perceived artisticness (r = .10*), and both externally-rated and self-report subtle discrimination (r = -.11* and r = -.12*, respectively). In addition, participants' openness to experience was significantly related to perceived competence (r = .24**), perceived trustworthiness (r = .12*), perceived artisticness (r = .18**), perceived riskiness (r = -.14**, and self-reported subtle discrimination (r = -.11*) and interpersonal fairness (r = .10*).

Manipulation Checks. I conducted three manipulation checks. At the end of the survey, participants were asked the gender, hierarchical position, and tattoo status of the worker presented to them in the vignette.

Analytic Procedures

Before testing the hypotheses, I conducted a confirmatory factor analysis (CFA) in R (Version 4.4.2; R Core Team, 2024) with RStudio (RStudio Team, 2024) using the lavaan package (Rosseel, 2012), to ensure distinctiveness of the mediators and outcomes. Specifically, I contrasted the hypothesized eight-factor model (i.e., each mediator and outcome as separate) to (1) a four-factor model separating the mediators into context-free (i.e., perceived competence and trustworthiness) and tattoo-specific (i.e., perceived artisticness and riskiness), and the outcomes into negative (both self-report and external-rated subtle discrimination) and positive (both self-report and external-rated interpersonal fairness), (2) a two-factor model separating the mediators (i.e., perceived competence, trustworthiness, artisticness, and riskiness) and outcomes (i.e., both self-report and external-rated subtle discrimination and interpersonal fairness), and (3) a one-factor model combining all factors, which would be consistent with inadequate explication of constructs (i.e., a threat to construct validity; Shadish et al., 2002).

To evaluate model fit for the CFAs, I followed recommendations from a recent review of the CFA literature (Howard et al., 2025). Specifically, I report the following goodness of fit indices: comparative fit index (CFI), Tucker-Lewis Index (TLI), RMSEA, and SRMR. The recommended cutoff criteria (Hu & Bentler, 1999) for each index are: CFI ≥ .95, TLI ≥ .95, RMSEA ≤ .06, SRMR ≤ .08. However, Howard et al. (2025) provide ranges to interpret these indices to evaluate the strength of the indices, namely weak, moderate, or strong. They also provide overall ranges and ranges based on degrees of freedom (df), namely for low (df < 51), medium (df between 51-163), and high (df > 163) degrees of freedom. My CFAs fall in the high df category, and as such, I use the overall and high degrees of freedom ranges as guides for interpreting my CFAs. See Table 3.2 for the recommended ranges of each index.

Analyses for hypothesis testing (i.e., ANOVAs and MANOVAs) were conducted in SPSS version 28 with all mediation and moderation analyses using the PROCESS macro v.4.1 (Hayes, 2022), with the multi-categorical predictor and moderator options. Specifically, I first used one-way ANOVAs to test the direct effects of tattoo content on subtle discrimination and interpersonal fairness. Second, I conducted a MANOVA to assess the multivariate effects of tattoo content on stereotypes, namely perceptions of competence, trustworthiness, artisticness, and riskiness, which I followed by a series of one-way ANOVAs for each stereotype, and Tukey post hoc tests to identify the differences between the tattoo content categories. Third, I used Hayes' (2022) PROCESS macro to test the indirect effects of tattoo content on treatment through stereotypes, and to test the conditional indirect effects, with hierarchical position and gender as moderators of these indirect relationships.

I used the bias corrected 95% confidence intervals (CIs), based on 5,000 bootstrapped samples to determine statistical significance, with significance indicated when the CIs do not

cross zero. I assessed the moderated mediation results based on the index of moderated mediation, which has two purposes: (1) testing whether the indirect effect varies as a function of the moderator, and (2) testing whether the levels of the moderator significantly differ from each other (Hayes, 2015). As such, a significant index of moderated mediation indicates that the indirect effect is moderated and that the effects at each level of the moderator differ from each other (i.e., the slope of the lines differ from each other). Analyses were conducted both without and with controls – namely age of participant, participant tattoo status, participant familiarity with tattoos, and participant openness to experience – and the results remain the same. Thus, the results reported below are without controls.

Table 3.2
Recommended Ranges for CFA Fit Indices from Howard et al. (2025)

Strength	Category	CFI	TLI	RMSEA	SRMR
Weak	Overall	.90-.94	.88-.92	.09-.07	.08-.06
	High df	.89-.92	.83-.90	.08-.07	.08-.06
Moderate	Overall	.94-.97	.92-.96	.07-.06	.06-.04
	High df	.92-.95	.90-.94	.07-.06	.06-.05
Strong	Overall	.97-.99	.96-.98	.06-.04	.04-.03
	High df	.95-.98	.94-.97	.06-.04	.05-.04

Note. Adapted from Howard et al.'s (2025) review and recommendations for confirmatory factor analysis goodness of fit indices. df = degrees of freedom.

Results

Confirmatory Factor Analysis

The results from the confirmatory factor analyses show an adequate fit with the eight-factor model: χ^2 (1485) = 23238.45, $p < .001$, CFI = 0.84, TLI = 0.83, RMSEA = 0.08 [90% CI:

0.07, 0.08], SRMR = 0.05. Based on commonly recommended cut off values (Hu & Bentler, 1999), the CFI and TLI are below, and RMSEA is above, the recommended values. However, considering Howard et al.'s (2025) recommended ranges, the CFI and TLI suggest a weak model fit, the RMSEA suggests a weak to moderate fit, while the SRMR is within the recommended range and suggests a moderate to strong fit.

The fit was not adequate with the four-factor model: χ^2 (1424) = 12381.38, $p < .001$, CFI = 0.50, TLI = 0.48, RMSEA = 0.13 [90% CI: 0.13, 0.13], SRMR = 0.19, two-factor model: χ^2 (1429) = 15939.85, $p < .001$, CFI = 0.33, TLI = 0.31, RMSEA = 0.15 [90% CI: 0.15, 0.15], SRMR = 0.18, or the one-factor model: χ^2 (1430) = 17436.76, $p < .001$, CFI = 0.26, TLI = 0.24, RMSEA = 0.16 [90% CI: 0.16, 0.16], SRMR = 0.21.

I compared the model fit indices, which is critical to determine the acceptability of the fit of the hypothesized model (Howard et al., 2025): The eight-factor model provided a significantly better fit to the data than the four-factor model ($\Delta \chi^2$ (22) = 7407.6, $p < .001$), two-factor model ($\Delta \chi^2$ (27) = 10966, $p < .001$), or one-factor model ($\Delta \chi^2$ (28) = 12463, $p < .001$). Taken together, the fit indices for my hypothesized eight-factor model were within the weak (CFI and TLI) to moderate or strong (RMSEA and SRMR) fit ranges, and this eight-factor model provided the best fit when compared to other plausible alternative models. As such, I proceeded with my hypothesized eight-factor model.

Hypothesis Testing

See Table 3.3 for means, standard deviations, and reliabilities for the study variables. Correlations among study variables appear in Table 3.4. Appendix F contains Table F1 with correlations among the participant variables (i.e., gender, age, tattoo status, tattoo familiarity, and

openness to experience) and Table F2 with correlations between participant variables and study variables.

Table 3.3
Means, Standard Deviations, and Reliabilities for Study 1 Variables

Variables	*M*	*SD*	*Reliabilities* [a]
1. Women	.55	.50	
2. Men	.45	.50	
3. Age	38.18	11.48	
4. Tattoo status: No	.72	.45	
5. Tattoo status: Yes	.28	.45	
6. Tattoo familiarity	3.19	1.13	
7. No tattoo condition	.42	.49	
8. Dark content tattoo condition	.28	.45	
9. Light content tattoo condition	.31	.46	
10. Coworker position condition	.37	.48	
11. Supervisor position condition	.34	.47	
12. Supervisor's supervisor position condition	.29	.46	
13. Woman gender condition	.51	.50	
14. Man gender condition	.49	.50	
15. Competence	4.11	.60	.88
16. Trustworthiness	6.07	1.04	.94
17. Artisticness	3.35	.87	.79
18. Riskiness	1.35	.58	.93
19. SD (self-report)	1.31	.48	.86
20. SD (external-rated)	1.55	.80	.89
21. IF (self-report)	4.77	.48	.93
22. IF (external-rated)	4.36	1.21	.96
23. Openness	4.12	.81	.76

Note. N = 448-455. Variables 1-6 refer to the participant. Variables 15-18 refer to perceptions. SD = subtle discrimination. IF = interpersonal fairness. [a]All reliabilities are alphas except for SD and IF external, which are average measure ICC[2]. Openness refers to participants' openness to experience. Higher scores indicate more of the variable.

Table 3.4

Correlations for Study 1 Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. No tattoo														
2. Dark content tattoo	-.52**													
3. Light content tattoo	-.56**	-.41**												
4. Coworker	.01	.01	-.01											
5. Supervisor	-.004	.001	.003	-.55**										
6. Supervisor's supervisor	-.002	-.01	.01	-.49**	-.46**									
7. Gender condition	-.04	.002	.04	.01	.03	-.04								
8. Competence	-.01	.02	-.02	-.02	-.003	.03	.03							
9. Trustworthiness	-.01	-.04	.05	-.03	.03	.002	.02	.50**						
10. Artisticness	-.17**	.10*	.09	-.03	.07	-.04	.15**	.50**	.31**					
11. Riskiness	-.20**	.26**	-.04	-.07	.06	.01	.05	-.23**	-.24**	.04				
12. SD (self-report)	.06	-.04	-.02	.09	-.08	-.01	-.02	-.34**	-.24**	-.18**	.23**			
13. SD (external-rated)	.04	-.08	.04	.11*	-.08	-.03	-.05	-.12*	-.07	-.03	.10*	.25**		
14. IF (self-report)	.02	-.01	-.01	.001	.01	-.01	.04	.22**	.18**	.08	-.27**	-.42**	-.19**	
15. IF (external-rated)	-.09	.09	.01	-.12**	.10*	.03	.08	.09*	.04	.10*	-.03	-.19**	-.75**	.11*

Note. N = 448-455. Variables 1-7 refer to conditions, and 8-11 refer to perceptions. Gender condition is dummy coded with man = 0 and woman = 1. SD = subtle discrimination. IF = interpersonal fairness.

* $p < .05$, ** $p < .01$

Direct Effect Results. To test Hypotheses 1 and 4, I conducted one-way ANOVAs. Hypothesis 1 predicted that dark tattoo content would have a direct effect on subtle discrimination compared to (a) light tattoo content or (b) no tattoo. The were no significant differences among tattoo content conditions in predicting self-reported subtle discrimination (F (2, 452) = .81, p = .44) or externally-rated subtle discrimination (F (2, 452) = 1.60, p = .20), thus Hypothesis 1 is not supported.

Hypothesis 4 predicted observers would report greater interpersonal fairness towards colleagues with light tattoo content, compared to (a) dark tattoo content or (b) no tattoo. Again, there were no significant differences among tattoo content conditions in predicting the self-reported interpersonal fairness (F (2, 452) = .06, p = .94) or the externally-rated interpersonal fairness (F (2, 452) = 2.41, p = .09), thus Hypothesis 4 is not supported.

To test Hypotheses 2 and 5, I conducted a MANOVA. The overall MANOVA, namely the Wilks' lambda F statistic, was significant, λ = .89, F (8, 898) = 6.54, p < .001, partial $\eta 2$ = .06. Subsequent tests showed that tattoo content did not affect perceived competence (F (2, 452) = .13, p = .88, partial $\eta 2$ = .001) or trustworthiness (F (2, 452) = .57, p = .57, partial $\eta 2$ = .003). However, tattoo content did affect perceived artisticness (F (2, 452) = 7.07, p < .001, partial $\eta 2$ = .03) and riskiness (F (2, 452) = 17.54, p < .001, partial $\eta 2$ = .07). A Tukey post hoc test showed that workers with dark content tattoos (M = 3.49, SD = .81, p = .004) and workers with light content tattoos (M = 3.47, SD = .85, p = .006) were rated higher than workers with no tattoos (M = 3.17, SD = .90) on perceived artisticness[5]. For perceived riskiness, workers with dark content

[5] There was no significant difference between workers with dark content tattoos compared to workers with light content tattoos for perceptions of artisticness.

tattoos (M = 1.59, SD = .68) were rated higher than workers with light content tattoos (M = 1.31, SD = .54, $p < .001$) or no tattoos (M = 1.22, SD = .47, $p < .001$)[6].

Thus, Hypotheses 2 and 5 were partially supported. For Hypothesis 2, on the one hand, there is support for workers with dark content tattoos being perceived as more risky than those with light content tattoos (H2a) or no tattoos (H2b). In addition, workers with dark content tattoos were also perceived as more artistic than those with no tattoos, but this is in the opposite direction as what I predicted in Hypothesis 2b. On the other hand, there is no support for the hypotheses that there would be differences between workers with dark content tattoos and those with light content tattoos (H2a) or no tattoos (H2b) in perceived competence or trustworthiness.

For Hypothesis 5, there is support for workers with light content tattoos being perceived as more artistic than those with no tattoos (H5b), and less risky than those with dark content tattoos (H5a). However, there is no support for differences between workers with light content tattoos and either those with dark content tattoos (H5a) or no tattoos (H5b) in perceived competence or trustworthiness.

Indirect Effects Results. I tested Hypotheses 3 and 6 using Hayes' (2022) PROCESS v4.1. Hypotheses 3 and 6 predicted indirect effects of dark tattoo content on subtle discrimination, and light tattoo content on interpersonal fairness, through perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and (d) riskiness. See Tables 3.5 and 3.6 for mediation results testing Hypotheses 3 and 6, respectively.

Self-reported Subtle Discrimination as the Outcome. The indirect effect of dark tattoo content on self-reported subtle discrimination was not significant through perceived competence

[6] There was no significant difference between workers with light content tattoos and workers with no tattoos on perceived riskiness.

(*b* = -.01, *SE* = .02, 95% CI [-.044, .029]), or perceived trustworthiness (*b* = .01, *SE* = .01, 95% CI [-.020, .036]), not supporting Hypotheses 3a or 3b.

However, the indirect effect of dark tattoo content on self-reported subtle discrimination was significant through perceived artisticness (*b* = -.03, *SE* = .01, 95% CI [-.059, -.009]), but this effect was in the opposite direction than I predicted, and thus does not support Hypothesis 3c. Contrary to prediction, the link between dark tattoo content and perceived artisticness was positive (*b* = .32, *SE* = .10, 95% CI [.124, .513]), and perceived artisticness negatively affected self-reported subtle discrimination (*b* = -.10, *SE* = .03, 95% CI [-.147, -.045]).

The indirect effect of dark tattoo content on self-reported subtle discrimination was also significant through perceived riskiness (*b* = .08, *SE* = .02, 95% CI [.046, .126]), supporting Hypothesis 3d. In addition, all the individual paths were significant and in the predicted direction, i.e., dark tattoo content → perceived riskiness (*b* = .38, *SE* = .06, 95% CI [.250, .502]), perceived riskiness → self-reported subtle discrimination (*b* = .22, *SE* = .04, 95% CI [.143, .298]). See Table 3.5 for Hypothesis 3 mediation results.

External-rated Subtle Discrimination as the Outcome. The indirect effect of dark tattoo content on externally-rated subtle discrimination was not significant through perceived competence (*b* = -.004, *SE* = .01, 95% CI [-.029, .020]), trustworthiness (*b* = .003, *SE* = .01, 95% CI [-.013, .023]), artisticness (*b* = -.01, *SE* = .02, 95% CI [-.042, .023]), or riskiness (*b* = .07, *SE* = .04, 95% CI [-.014, .157]), providing no additional support for Hypothesis 3. See Table 3.5.

Self-reported Interpersonal Fairness as the Outcome. The indirect effect of light tattoo content on self-reported interpersonal fairness was not significant through perceived competence (*b* = -.002, *SE* = .01, 95% CI [-.026, .023]), trustworthiness (*b* = .01, *SE* = .01, 95% CI [-.013, .027]), artisticness (*b* = .01, *SE* = .01, 95% CI [-.002, .036]), or riskiness (*b* = -.02, *SE* = .01, 95%

CI [-.053, .002]), not supporting Hypotheses 6a, 6b, 6c, or 6d. See Table 3.6 for Hypothesis 6 mediation results.

External-rated Interpersonal Fairness as the Outcome. The indirect effect of light tattoo content on externally-rated interpersonal fairness was not significant through perceived competence (b = -.002, SE = .01, 95% CI [-.033, .028]), trustworthiness (b = .004, SE = .01, 95% CI [-.014, .026]), artisticness (b = .04, SE = .02, 95% CI [-.003, .093]), or riskiness (b = -.01, SE = .02, 95% CI [-.054, .012]), not supporting Hypotheses 6a, 6b, 6c, or 6d. See Table 3.6 for Hypothesis 6 mediation results.

Table 3.5

Indirect Effects of Dark Tattoo Content on Subtle Discrimination (Hypothesis 3)

Predictor	**Mediators**							
	Perceived Competence		Perceived Trustworthiness		Perceived Artisticness		Perceived Riskiness	
	b	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*
Dark tattoo content	.027	.070	-.051	.120	.318**	.099	.376**	.064

	Outcomes			
	Subtle Discrimination (self-report)		Subtle Discrimination (external-rated)	
Mediators	*b*	*SE*	*b*	*SE*
Perceived competence	-.273	.035	-.151*	.062
Perceived trustworthiness	-.113	.021	-.054	.036
Perceived artisticness	-.096	.026	-.020	.044
Perceived riskiness	.220	.039	.175**	.067

Indirect Effects: Mediators	Subtle Discrimination (self-report)			Subtle Discrimination (external-rated)		
	b	*SE*	95% CI	*b*	*SE*	95% CI
Perceived competence	-.007	.019	-.046. .032	-.004	.012	-.029, .020
Perceived trustworthiness	.006	.014	-.020, .019	.003	.009	-.013, .023
Perceived artisticness	-.031	.013	-.058, -.009	-.006	.016	-.042, .023
Perceived riskiness	.083	.020	.047, .125	.066	.043	-.014, .157

Note. $N = 454$. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3.6

Indirect Effects of Light Tattoo Content on Interpersonal Fairness (Hypothesis 6)

Predictor	**Mediators**							
	Perceived Competence		Perceived Trustworthiness		Perceived Artisticness		Perceived Riskiness	
	b	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*
Light tattoo content	-.009	.067	.083	.117	.298**	.096	.099	.062

	Outcomes			
	Interpersonal Fairness (self-report)		Interpersonal Fairness (external-rated)	
Mediators	*B*	*SE*	*B*	*SE*
Perceived competence	.175***	.036	.182	.094
Perceived trustworthiness	.083***	.021	.048	.054
Perceived artisticness	.047	.026	.121	.066
Perceived riskiness	-.231***	.039	-.131	.102

Indirect Effects: Mediators	Interpersonal Fairness (self-report)			Interpersonal Fairness (external-rated)		
	b	*SE*	95% CI	*b*	*SE*	95% CI
Perceived competence	-.002	.012	-.027, .022	-.002	.014	-.033, .028
Perceived trustworthiness	.007	.010	-.014, .028	.004	.009	-.014, .026
Perceived artisticness	.014	.010	-.002, .035	.036	.025	-.003, .093
Perceived riskiness	-.023	.014	-.053, .004	-.013	.016	-.054, .012

Note. $N = 454$. * $p < .05$, ** $p < .01$, *** $p < .001$.

Conditional Indirect Effects: Hierarchical Position. For Research Question 1, I used Hayes' (2022) PROCESS v4.1 to test the moderated mediation models. Research Question 1 asked whether hierarchical position moderated the indirect effects of tattoo content on (a) subtle discrimination and (b) interpersonal fairness. The indices of moderated mediation appear in Tables 3.7 and 3.8. For the indices of moderated mediation that were not significant, I did not proceed further with examining the indirect effects at each level of the moderator; however, for those that are significant, the indirect effects for each group (i.e., the three levels of the hierarchical position condition) are included in the text below.

Self-reported Subtle Discrimination as the Outcome. Hierarchical position did not moderate the indirect effects of dark tattoo content on self-reported subtle discrimination through perceptions of competence, trustworthiness, or riskiness (see Table 3.7). However, with perceived artisticness as the mediator, the index of moderated mediation for supervisor's supervisor, with coworker as the reference group, was significant (b = .05, SE = .03, 95% CI [.005, .112]). This significant index of moderated mediation indicates that the indirect effect of dark tattoo content on self-reported subtle discrimination through perceived artisticness did differ by level of hierarchical position. Specifically, dark tattoo content indirectly affected less subtle discrimination through higher perceived artisticness, and this effect was significant when the worker was presented as a coworker (b = -.05, SE = .02, 95% CI [-.094, -.015]) or supervisor (b = -.04, SE = .02, 95% CI [-.084, -.007]), but was not significant when the worker was presented as a supervisor's supervisor (b = .003, SE = .02, 95% CI [-.031, .038]).

External-rated Subtle Discrimination as the Outcome. Hierarchical position did not moderate the indirect effects of dark tattoo content on externally-rated subtle discrimination through perceptions of competence, trustworthiness, artisticness, or riskiness (see Table 3.7).

Self-reported Interpersonal Fairness as the Outcome. Hierarchical position did not moderate the indirect effects of light tattoo content on self-reported interpersonal fairness through perceptions of competence, artisticness, or riskiness (see Table 3.8). However, the index of moderated mediation was significant for supervisor's supervisor, with coworker as the reference group, in the indirect effect of light tattoo content on self-reported interpersonal fairness through perceived trustworthiness (b = -.05, SE = .03, 95% CI [-.127, -.004]). The indirect effect was not significant for any of the hierarchical positions; however, the supervisor's supervisor condition (b = -.02, SE = .02, 95% CI [-.070, .009]) was statistically weaker than the coworker condition (b = .03, SE = .02, 95% CI [-.002, .073]) and the supervisor condition (b = .01, SE = .02, 95% CI [-.030, .048]).

External-rated Interpersonal Fairness as the Outcome. Hierarchical position did not moderate the indirect effects of light tattoo content on externally-rated interpersonal fairness through perceptions of competence, trustworthiness, artisticness, or riskiness (see Table 3.8).

Table 3.7

Conditional Indirect Effects by Hierarchical Position of Dark Tattoo Content on Subtle Discrimination (Research Question 1)

Predictor		**Mediators**											
		Perceived Competence			Perceived Trustworthiness			Perceived Artisticness			Perceived Riskiness		
		b	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
Index of moderated mediation for supervisor condition	SR	.020	.043	-.062, .109	.007	.034	-.068, .070	.008	.023	-.038, .057	.047	.039	-.025, .128
	ER	.011	.027	-.037, .075	.003	.019	-.040, .043	.002	.012	-.020, .033	.037	.041	-.022, .140
Index of moderated mediation for supervisor's supervisor condition	SR	.047	.049	-.044, .151	.038	.034	-.002, .148	.051	.027	.005, .112	.036	.041	-.041, .120
	ER	.026	.034	-.021, .112	.031	.031	-.013, .106	.011	.028	-.037, .078	.029	.040	-.035, .127

Note. $N = 455$. SR = self-report. ER = external-rated. The reference group for the indices or moderated mediation is the coworker.

Table 3.8

Conditional Indirect Effects by Hierarchical Position of Light Tattoo Content on Interpersonal Fairness (Research Question 1)

Predictor		**Mediators**											
		Perceived Competence			Perceived Trustworthiness			Perceived Artisticness			Perceived Riskiness		
		b	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
Index of moderated mediation for supervisor condition	SR	-.003	.028	-.064, .053	-.020	.026	-.080, .025	-.006	.013	-.036, .018	-.053	.040	-.148, .009
	ER	-.003	.034	-.075, .067	-.012	.024	-.072, .030	-.016	.034	-.096, .045	-.030	.040	-.133, .035
Index of moderated mediation for supervisor's supervisor condition	SR	-.019	.031	-.081, .043	-.052	.031	-.127, -.004	-.004	.013	-.035, .021	-.013	.030	-.081, .039
	ER	-.021	.039	-.114, .050	-.030	.037	-.115, .038	-.011	.034	-.087, .053	-.008	.023	-.063, .035

Note. $N = 455$. SR = self-report. ER = external-rated.

Conditional Indirect Effects: Gender. I again used Hayes' (2022) PROCESS v4.1 to test for moderated mediation to answer Research Question 2, which asked whether gender moderated the indirect effects of tattoo content on (a) subtle discrimination and (b) interpersonal fairness. The indices of moderated mediation can be found in Tables 3.9 and 3.10. I did not proceed further with the indirect effects at each level of the moderator for any non-significant indices of moderated mediation. However, for the significant indices of moderated mediation, the indirect effects for each gender are included in-text below.

Self-reported Subtle Discrimination as the Outcome. Gender did not moderate the indirect effects of dark tattoo content on self-reported subtle discrimination through perceptions of trustworthiness, artisticness, or riskiness (see Table 3.9).

However, gender did moderate the indirect effect of dark tattoo content on self-reported subtle discrimination through perceived competence (index of moderated mediation: b = .08, SE = .04, 95% CI [.007, .163]). This indirect effect was not significant for women (b = -.05, SE = .03, 95% CI [-.105, .007]) or men (b = .03, SE = .03, 95% CI [-.017, .089]). However, the significant index of moderation mediation indicates that this indirect effect for women was significantly different than the indirect effect for men, namely the indirect effect was statistically weaker for women compared to men.

External-rated Subtle Discrimination as the Outcome. Gender did not moderate the indirect effects of dark tattoo content on externally-rated subtle discrimination through perceptions of competence, trustworthiness, artisticness, or riskiness (see Table 3.9).

Self-reported Interpersonal Fairness as the Outcome. Gender did not moderate the indirect effects of light tattoo content on self-reported interpersonal fairness through perceptions of competence, trustworthiness, artisticness, or riskiness (see Table 3.10).

External-rated Interpersonal Fairness as the Outcome. Gender did not moderate the indirect effects of light tattoo content on externally-rated interpersonal fairness through perceptions of competence, trustworthiness, artisticness, or riskiness (see Table 3.10).

Supplemental Analyses

The correlation in Table 3.4 between and among the self-reported and externally-rated subtle discrimination and interpersonal fairness suggest that method might be more important than content. The correlation between self-reported subtle discrimination and externally-rated subtle discrimination was .11 while the correlation between externally-rated subtle discrimination and externally-rated interpersonal fairness was -.75. As such, I conducted additional CFAs to examine this further. Specifically, a four-factor model with each outcome separate (i.e., self-reported subtle discrimination, externally-rated subtle discrimination, self-reported interpersonal fairness and externally-rated interpersonal fairness), a two-factor model separating into negative and positive content (i.e., subtle discrimination and interpersonal fairness), a two-factor model separating into method (i.e., self-reported and externally-rated), and a one-factor model with all outcomes together.

The four-factor model with each outcome separate showed the best fit: χ^2 (489) = 3029.34, $p < .001$, CFI = 0.82, TLI = 0.80, RMSEA = 0.11 [90% CI: 0.10, 0.11], SRMR = 0.06. The SRMR suggests a moderate fit while the CFI, TLI, and RMSEA suggest a weak fit. However, the other models showed poorer fit, namely the two-factor model with separating by content (negative and positive): χ^2 (494) = 8644.64, $p < .001$, CFI = 0.41, TLI = 0.37, RMSEA = 0.19 [90% CI: 0.19, 0.20], SRMR = 0.27, the two-factor model separating by method (self-report vs external-rated): χ^2 (494) = 5170.80, $p < .001$, CFI = 0.66, TLI = 0.64, RMSEA = 0.15 [90% CI: 0.14, 0.15], SRMR = 0.11, and the one-factor model: χ^2 (495) = 8657.24, $p < .001$, CFI =

0.41, TLI = 0.37, RMSEA = 0.19 [90% CI: 0.19, 0.20], SRMR = 0.22. Comparing fit, the four-factor model showed a significantly better fit than the two-factor separated by content ($\Delta \chi^2$ (5) = 5615.3, $p < .001$), the two-factor separated by method ($\Delta \chi^2$ (5) = 2141.5, $p < .001$), or the one-factor ($\Delta \chi^2$ (6) = 5627.9, $p < .001$). The two 2-factor models could not be compared directly as they are not nested models.

Summary of Results: Study 1

In Study 1, I conducted analyses to (1) test Hypotheses 1-6 regarding the direct and indirect effects of tattoo content on perceptions, namely perceived competence, trustworthiness, artisticness, and riskiness, and treatment, namely subtle discrimination and interpersonal fairness, of tattooed colleagues. (2) To answer Research Questions 1-2 asking about the moderating roles of hierarchical position and gender in the indirect effects of tattoo content on treatment of tattooed colleagues through perceptions of competence, trustworthiness, artisticness, and riskiness. A list my Hypotheses and Research Questions with results for Study 1 can be found in Tables 3.11 and 3.12, respectively.

Table 3.9

Conditional Indirect Effects by Gender of Dark Tattoo Content on Subtle Discrimination (Research Question 2)

Predictor		**Mediators**											
		Perceived Competence			Perceived Trustworthiness			Perceived Artisticness			Perceived Riskiness		
		b	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
Index of moderated mediation	SR	.080	.040	.007, .165	.028	.031	-.025, .097	.025	.021	-.010, .072	-.009	.031	-.066, .058
	ER	.044	.033	-.002, .123	.013	.020	-.015, .062	.005	.016	-.026, .040	-.008	.030	-.083, .043

Note. $N = 455$. SR = self-report. ER = external-rated.

Table 3.10

Conditional Indirect Effects by Gender of Light Tattoo Content on Interpersonal Fairness (Research Question 2)

Predictor		**Mediators**											
		Perceived Competence			Perceived Trustworthiness			Perceived Artisticness			Perceived Riskiness		
		b	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
Index of moderated mediation	SR	-.019	.025	-.070, .029	.003	.020	-.045, .038	-.018	.014	-.010, .023	.027	.031	-.025, .103
	ER	-.019	.031	-.091, .035	.002	.017	-.032, .042	-.046	.036	-.127, .009	.016	.024	-.027, .072

Note. $N = 455$. SR = self-report. ER = external-rated.

Table 3.11
Summary of Hypotheses and Results: Study 1

Hypotheses		Support for Hypothesis?
***Hypothesis 1*:**	There will be greater subtle discrimination towards workers with dark content tattoos than workers with (a) light content tattoos or (b) no tattoos.	Not supported
***Hypothesis 2*:**	Workers with dark content tattoos will be perceived more negatively (i.e., rated lower on perceived competence, trustworthiness, and artisticness, and higher on perceived riskiness) compared to workers with (a) light content tattoos or (b) no tattoos.	Partially supported • No support for 2a or 2b with perceptions of competence or trustworthiness. • Support for both 2a and 2b with perceived riskiness. • 2b with perceived artisticness was significant but in opposite direction so not supported.
***Hypothesis 3*:**	The effects dark tattoo content on subtle discrimination will be mediated by perceived (a) competence, (b) trustworthiness, (c) artisticness, and (d) riskiness.	Partially supported: • 3a and 3b not supported. • 3c not supported – the indirect effect is significant, but in the opposite direction. • 3d supported.
***Hypothesis 4*:**	*Hypothesis 4*: There will be greater interpersonal fairness towards workers with light content tattoos than workers with (a) dark content tattoos or (b) no tattoos.	Not supported
***Hypothesis 5*:**	Workers with light content tattoos will be perceived more positively (i.e., rated higher on perceived competence, trustworthiness, and artisticness, and lower on riskiness) compared to workers with (a) dark content tattoos or (b) no tattoos.	Partially supported • No support for 5a or 5b with perceptions of competence or trustworthiness. • Support for 5b (but not 5a) with perceived artisticness. • Support for 5a (but not 5b) with perceived riskiness.
***Hypothesis 6*:**	The effects of light tattoo content on interpersonal fairness will be mediated by perceived (a) competence, (b) trustworthiness, (c) artisticness, and (d) riskiness.	Not supported

Table 3.12
Summary of Research Questions and Results: Study 1

Research Questions		**Findings**
Research Question 1:	Will hierarchical position moderate the indirect effects of tattoo content on (a) subtle discrimination and (b) interpersonal fairness?	Mixed: • 1a: Hierarchical position moderated the indirect effect of dark tattoo content on subtle discrimination through perceived artisticness, such that this indirect effect was significant when the tattooed worker was a coworker or supervisor, but not when the tattooed worker was a supervisor's supervisor. • 1b: Hierarchical position moderated the indirect effects of light tattoo content on interpersonal fairness through perceived trustworthiness, such that the indirect effects differed by level of the moderator; however, the indirect effect was not significant for any individual level of the moderator. • 1a and 1b: Hierarchical position did not moderate any of the other indirect effects.
Research Question 2:	Will gender moderate the indirect effects of tattoo content on (a) subtle discrimination and (b) interpersonal fairness?	Mixed: • 2a: Gender moderated the indirect effect of dark tattoo content on subtle discrimination through perceived competence, such that the slopes of the lines differed from each other, but the indirect effect was not significant for either gender. • 2a and 2b: Gender did not moderate any other indirect effects.

Discussion

The results of Study 1 suggest that tattoo content does not directly affect observer treatment of tattooed colleagues as neither subtle discrimination nor interpersonal fairness (with self-report and external ratings for each) were direct outcomes, thereby providing no support for Hypotheses 1 and 4.

Tattoo content did affect some observer perceptions of tattooed colleagues. Specifically, workers with dark tattoo content were perceived as more risky compared to those with light tattoo content or no tattoo, and perceived as more artistic compared to those with no tattoo. In addition, workers with light tattoo content were perceived as more artistic compared to those with no tattoo. However, there were no significant direct effects of tattoo content on perceived competence or trustworthiness. These findings suggest that when considering observer perceptions of individuals with stigmatized characteristics, it may be more important to consider context-specific stereotypes (i.e., stereotypes specific to the stigmatized characteristic, in this case tattoos), such as perceptions of riskiness and artisticness for tattooed individuals, rather than general context-free stereotypes of stigmatized characteristics, such as perceptions of competence and trustworthiness.

The mediation results supported the proposed indirect effects of dark tattoo content on self-reported subtle discrimination through the tattoo-specific stereotypes, namely perceived artisticness and riskiness; however, the indirect effect through perceived artisticness was in the opposite direction to what I predicted. I initially predicted that dark tattoo content would be related to greater subtle discrimination through lower perceived artisticness, but the results show that dark tattoo content is related to lower subtle discrimination through greater perceived artisticness. I made my predictions based on expectancy violations theory (Burgoon, 2015;

Burgoon & Hale, 1988) suggesting that dark tattoo content would be a negative expectancy violation resulting in negative perceptions, such as lower artisticness. However, because both dark and light tattoo content resulted in more positive perceptions of artisticness than the no tattoo control group, these results suggest that tattoos themselves may cause observers to perceive their tattooed colleagues as more artistic, regardless of tattoo content.

In contrast, the general context-free stigma stereotypes, namely perceived competence and trustworthiness, were not significant as mediators in the indirect effects of dark tattoo content on subtle discrimination. In addition, there were no significant indirect effects of light tattoo content on interpersonal fairness through either the context-free stereotypes (i.e., perceived competence and trustworthiness) or the tattoo-specific stereotypes (i.e., perceived artisticness and riskiness).

I suggest two explanations for the results. First, the significant results for dark but not light tattoo content suggests that dark tattoo content is a more salient signal and thus elicits stronger observer reactions to tattooed colleagues. The salience of dark tattoo content can be understood by considering both negativity bias (Skowronski & Carlston, 1987, 1989) and the idea that bad is stronger than good (Baumeister et al., 2001). In both of these cases, negative cues stand out more (i.e., are stronger violations of expectations), and thus, impact observer reactions more than positive cues. Dark tattoo content with its intimidating and threatening nature, can be considered a negative morality-related cue, which elicits negativity bias, and this is particularly relevant to how participants make sense of the signal in the vignette.

Second, the findings of dark tattoo content relating to either more or less subtle discrimination depending on whether perceived riskiness or artisticness, respectively, was included as a mediator can be explained by polysemy from the literature on nonverbal

communication. Polysemy is the idea that a nonverbal cue can have more than one meaning (Burgoon et al., 2022). With the current study, dark tattoo content, as an aspect of appearance, is a nonverbal communication cue that communicates both riskiness and artisticness, which can be thought of as negative and positive stereotypes, respectively.

Three moderating effects were significant. First, hierarchical position moderated the indirect effect of dark tattoo content on self-reported subtle discrimination through perceived artisticness. Dark tattoo content was related to less self-reported subtle discrimination through greater perceived artisticness, and this indirect effect was significant when the worker was presented as a coworker or supervisor, but not significant when the worker was presented as a supervisor's supervisor, answering Research Question 1. This result suggests that leaders holding a higher-level within the organizational hierarchy may not be perceived in the same way as coworkers or lower-level supervisors.

Expectancy violations theory (Burgoon, 2015; Burgoon & Hale, 1988) suggests that leaders who violate norms are perceived more favourably due to their higher status and power, which serves a protective function from the effects of stigma (Link & Phelan, 2001). However, my findings do not support that, but rather the moderation suggests that coworkers and supervisors with dark tattoo content benefit with observers perceiving them as more artistic, and in turn behaving with less subtle discrimination towards them. This beneficial effect was not found for supervisor's supervisor, which could be due to tattoos violating expectations of the prototypical leader appearance of being more professional and formal (e.g., Maran et al., 2021).

Second, the indirect effect of light tattoo content on self-reported interpersonal fairness through perceived trustworthiness differed by hierarchical position; however, the indirect effects were not significant for any of the three hierarchical positions on their own. As such, this finding

is neither interpretable nor meaningful. Hierarchical position did not moderate any of the other indirect effects of dark or light tattoo content on subtle discrimination or interpersonal fairness.

The non-significant findings for hierarchical position as a moderator suggests that observer perceptions and treatment of tattooed colleagues are the same whether the tattooed colleague is a peer or a leader. In addition, the non-significant findings for hierarchical position as a moderator could be due to the nature of the manipulation. Specifically, the manipulation of hierarchical position was successful in that participants correctly identified the condition to which they were assigned; however, the manipulation was limited to a title, namely coworker, supervisor, or supervisor's supervisor, which does not manipulate the power differential inherent in the organizational hierarchy. As such, the results for this manipulation may not be representative of how employees would perceive and treat their supervisors when these hierarchical positions are more salient in the real-world.

Third, gender moderated the indirect effects of dark tattoo content on self-reported subtle discrimination through perceived competence in that the effects differed between women and men. However, although the indirect effects of dark tattoo content on self-reported subtle discrimination differed by gender, the effects themselves are not statistically significant, that is, neither gender had a significant indirect effect for dark tattoo content on self-reported subtle discrimination through perceived competence. In addition, gender did not moderate any of the other tested indirect effects of dark or light tattoo content on subtle discrimination or interpersonal fairness through stereotypes, namely perceived competence, trustworthiness, artisticness, or riskiness. These non-significant results suggest that there are no differences in the way in which women and men with tattoos are perceived and treated by colleagues. In addition, the non-significant findings for gender as a moderator suggests that tattoo content is more salient

to observers than gender—especially in a vignette context, and thus, may overpower any gender effects.

Taken together, the moderated mediation results suggest that any effects of tattoos themselves are sufficiently strong such that hierarchical position and gender do not make a difference in observer perceptions or treatment of tattooed colleagues.

Strengths and Limitations

There were several strengths to Study 1. First, using a randomized experimental design enhances internal validity and the ability to make causal inferences from this research (Shadish et al., 2002). Second, operationalizing two tattoo-specific stereotypes, namely perceptions of artisticness and riskiness, and two general stigma stereotypes, namely perceptions of competence and trustworthiness, reduces issues of mono-operation bias for the mediators. Third, the email writing task is a methodological strength by having the responses coded by trained RAs to provide external-ratings of subtle discrimination and interpersonal fairness. This methodological strength is especially important because it allows us to make sense of the nuanced significant and non-significant effects for self-reported and externally-rated subtle discrimination.

At the same time, there are several limitations to Study 1. First, all the mediators are self-report measures completed by participants, which raises potential issues of mono-method bias (Shadish et al., 2002). Second, the significant findings for subtle discrimination as an outcome were from the self-report subtle discrimination scale, which (a) may not align with actual behaviour, and (b) social desirability could play a role. Third, there are potential threats to mono-operation bias with regard to the predictors and outcomes (Shadish et al., 2002) with (a) only one tattoo represented each dark and light content categories thus the particular designs used may not

reflect the broader content categories, and (b) only one outcome for each negative and positive treatment, namely subtle discrimination and interpersonal fairness, respectively.

Motivation for Study 2

The randomized experimental design of Study 1 strengthens the ability to make causal inferences about direct effects of the manipulated predictors on the mediators; however, when considering the full indirect effects model, I cannot make causal inferences about overall indirect effects or the effects of the mediators on the outcomes. As such, manipulating the mediators with an experimental study using a vignette methodology and measuring the outcomes would strengthen the ability to make causal inferences about the complete indirect effects model. Several authors (e.g., Pirlott & MacKinnon, 2016; Stone-Romero & Rosopa, 2011) have pointed to the importance of using experimental research in this multi-step way to increase our ability to make causal inferences about mediation. In addition, manipulating the mediators and measuring the outcomes mitigates concerns regarding mono-method bias with the mediators and significant outcomes both self-report measures in Study 1. Taken together, for Study 2, I design an experimental study using vignettes that manipulate the significant mediators from Study 1, namely the tattoos-specific stereotypes of perceived artisticness and riskiness, and measuring subtle discrimination and interpersonal fairness as outcomes using both self-reported and externally-rated data.

References

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323-370.

Burgess, M., & Clark, L. (2010). Do the "savage origins" of tattoos cast a prejudicial shadow on contemporary tattooed individuals? *Journal of Applied Social Psychology*, *40*(3), 746-764.

Burgoon, J.K. (2015). Expectancy violations theory. In Berger, C.R., Roloff, M.E., Wilson, Dillard, J.P., Caughlin, J., & Solomon, D. (Eds.), *The international encyclopedia of interpersonal communication*. Wiley.

Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communications Monographs, 55*(1), 58-79.

Burgoon, J. K., Manusov, V., & Guerrero, L. K. (2022). *Nonverbal communication* (2nd ed.). Routledge.

Colquitt, J. A. (2001). On the dimensionality of organizational justice: a construct validation of a measure. *Journal of Applied Psychology*, *86*(3), 386-400.

Colquitt, J. A., & Rodell, J. B. (2015). Measuring justice and fairness. In R. Cropanzano & M. L. Ambrose (Eds.), *The Oxford handbook of justice in the workplace*, (pp.187-202). Oxford University Press.

Degelman, D., & Price, N. D. (2002). Tattoos and ratings of personal characteristics. *Psychological Reports*, *90*(2), 507-514.

Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, *18*(2), 192-203.

Fiske, S. T. (2018). Stereotype content: Warmth and competence endure. *Current Directions in Psychological Science*, *27*(2), 67-73.

Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, *50*(1), 1-22.

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Publications.

Howard, M. C., Boudreaux, M., Cogswell, J., Manix, K. G., & Oglesby, M. T. (2025). A literature review of model fit and model comparisons with confirmatory factor analysis: Formalizing the informal in organizational science. *Applied Psychology: An International Journal*, *74*(1), e12592.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1-55.

Jones, K. P., Peddie, C. I., Gilrane, V. L., King, E. B., & Gray, A. L. (2016). Not so subtle: A meta-analytic investigation of the correlates of subtle and overt discrimination. *Journal of Management, 42(6),* 1588-1613.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual review of Sociology*, *27*(1), 363-385.

Maran, T., Liegl, S., Moder, S., Kraus, S., & Furtner, M. (2021). Clothes make the leader! How leaders can use attire to impact followers' perceptions of charisma and approval. *Journal of Business Research*, *124*, 86-99.

Miller, B. K., Nicols, K. M., & Eure, J. (2009). Body art in the workplace: Piercing the prejudice? *Personnel Review*, *38*(6), 621-640.

Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, *76*(6), 845-855.

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, *19*(3), 39-52.

Pirlott, A. G., & MacKinnon, D. P. (2016). Design approaches to experimental mediation. *Journal of Experimental Social Psychology*, *66*, 29-38.

Ruggs, E. N., & Hebl, M. R. (2022). Do employees' tattoos leave a mark on customers' reactions to products and organizations? *Journal of Organizational Behavior, 43*(6), 965-982.

Scanlon, M. (2025). *Bottom-up mental illness stigma toward leaders.* [Doctoral dissertation, Queen's University].

Shadish, W.R., Cook, T.D., & Campbell, D.T. (2002). *Experimental and quasi-experimental designs for generalized causal experiments*. Wadsworth Publishing.

Skowronski, J. J., & Carlston, D. E. (1987). Social judgment and social memory: The role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, *52*(4), 689-699.

Skowronski, J. J., & Carlston, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin*, *105*(1), 131-142.

Stone-Romero, E. F., & Rosopa, P. J. (2011). Experimental tests of mediation models: Prospects, problems, and some solutions. *Organizational Research Methods*, *14*(4), 631-646.

Chapter 4:

Study 2

The purpose of Study 2 is to enable stronger causal inferences for the indirect effects of tattoo content on treatment of tattooed colleagues through perceptions of artisticness and riskiness. Study 1 results suggested some support for an indirect effects model: Based on the experimental design of Study 1, causal inferences can be made about the direct effects of dark tattoo content on the tattoo-specific mediators of perceived riskiness and artisticness. However, this leaves open the question of the nature of the associations between mediators and outcomes, as this was not addressed within Study 1's experimental design. Study 2 supplements this by enabling causal inferences about the effects of the tattoo-specific mediators, namely perceived riskiness and artisticness on the outcomes (i.e., subtle discrimination and interpersonal fairness). When examining mediation with experiments, the idea of using multiple experiments in which the predictor is manipulated, and separately, any mediators are manipulated strengthens the ability to make causal inferences (Pirlott & MacKinnon, 2016; Stone-Romero & Rosopa, 2011).

With another pre-registered[7] experimental study using vignettes, I manipulate the mediators that were significant in Study 1, namely the tattoo-specific stereotypes (i.e., perceived artisticness and riskiness), and measure the outcomes that reflect the effects of stigma (i.e., subtle discrimination and interpersonal fairness[8]). I also expand the nomological network of my conceptual model by including additional plausible outcomes, namely incivility, ostracism, inclusion, and help seeking, which I expand on below.

[7] https://osf.io/v5zfm/?view_only=c310a72eb19b4b76abfc9c05eeb064c7

[8] Although interpersonal fairness was not a significant outcome in the mediation analyses in Study 1, I include it in Study 2 to test again.

Tattoo-Specific Stereotypes and Outcomes

What we learned from Study 1 is that there are two important factors in understanding the effects of tattoos on observer perceptions of tattooed colleagues: (1) the nature of the tattoo content, and (2) tattoo-specific stereotypes, with each type of content and each stereotype having different effects. Study 1 results showed that colleagues with light or dark content tattoos were perceived as more artistic than those with no tattoos, and those with dark content tattoos were perceived as more risky than those with light content or no tattoos. Artisticness refers to perceptions of being creative and artsy, and riskiness refers to perceptions of being dangerous and irresponsible.

In addition, Study 1 results showed perceived artisticness and riskiness had opposite effects as mediators in the indirect effect of dark tattoo content on self-reported subtle discrimination. On the one hand, workers with dark content tattoos were less likely to be subtly discriminated against through greater perceptions of artisticness. On the other hand, workers with dark tattoo content were more likely to be discriminated against through greater perceptions of riskiness. In the current study, I examine if the effects of perceived artisticness and riskiness on subtle discrimination replicate when manipulating these tattoo-specific stereotypes. As such, I develop three vignette conditions describing a worker perceived as either: (a) artistic, (b) risky, or (c) a good worker.

I include a good worker condition as the comparison group to which I will compare the effects of each tattoo-specific stereotype on the outcomes. I use a good worker condition as the comparison because the tattoo-specific stereotypes of perceived artisticness and riskiness can be considered violations of the good worker expectation. Drawing from the ideal worker norm (Acker, 1990; Reid, 2015) and expectancy violations theory (Burgoon, 2015; Burgoon & Hale,

1988), we can consider a good worker to be what is expected of workers. As such, workers perceived as artistic or risky violate this expectation, which is positive or negative, respectively. The ideal worker image is someone who is committed to their work, with a focus on work as a priority in their life (Acker, 1990; Reid, 2015). Based on this ideal worker image, workers perceived as artistic or risky, violate what is expected by showing they have other interests, such as creative endeavours (i.e., artistic), or showing they are not dedicated to their work, such as being irresponsible (i.e., risky).

I propose that perceiving colleagues as artistic would be a positive expectancy violation because this artisticness could be applied to the work in a beneficial way; for example, workers using their artisticness by developing creative, innovative solutions to problems. In contrast, I propose that perceiving colleagues as risky would be a negative expectancy violation because this could be detrimental in the workplace; for example, workers bringing their riskiness into work by being irresponsible and making dangerous decisions. Taken together, I develop and use a good worker condition as a comparison group, such that treatment from observers towards colleagues perceived as artistic or risky will be compared to treatment towards a colleague perceived as a good worker.

I also include additional outcomes in the current study to mitigate mono-operation bias (Shadish et al., 2002) and thereby expand the nomological network of the effects of tattoo-specific stereotypes. Specifically, for negative treatment, I add incivility and ostracism, and for positive treatment, I add inclusion and help seeking. In Study 1, I examined subtle discrimination as the discriminatory behaviours (for negative expectancy violations), and interpersonal fairness as the positive alternative to discrimination with respectful behaviours (for positive expectancy violations). Each of the additional outcomes, namely incivility, ostracism, inclusion, and help

seeking, are plausible additional discriminatory and respectful behaviour outcomes in my conceptual model based on stigma (Link & Phelan, 2001) and expectancy violations (Burgoon, 2015; Burgoon & Hale, 1988) theories.

Stigma theory (Link & Phelan, 2001) suggests that assigning negative attributes to others creates separation from and discrimination towards different others, such as those with visible tattoos. First, the physical separation aspect of stigma theory suggests that the labels assigned to those that are different create a sense of "us" versus "them" which I suggest can be seen in separation by ostracizing those who are perceived as different, which would be a result of negative expectancy violations. In contrast, to align with positive expectancy violations, I suggest including those who are different as a positive alternative to physical separation. Ostracism is a form of rejection which involves excluding or ignoring others (Ferris et al., 2008) and has meaningful negative effects on those who are ostracized (Robinson et al., 2013); whereas inclusion signifies valuing and involving others, thereby fulfilling their belongingness needs in the work group (Shore et al., 2011).

Based on negative expectancy violations, negative perceptions such as being perceived as risky, are likely to result in greater ostracism. In contrast, based on positive expectancy violations, positive perceptions such as being perceived as artistic, are likely to result in greater inclusion. In addition, both ostracism and inclusion tie into the status loss aspect of stigma theory because ostracism or inclusion signal status loss or gain, respectively. For example, ignoring someone in meetings can suggest lower status, while treating them with dignity and respect can suggest higher status. This is important because both status loss and status gain have meaningful personal and organizational consequences (e.g., Marmot, 2005)

Second, the discrimination aspect of stigma theory suggests that those identified as different will be treated negatively. As with Study 1, I include subtle discrimination, which involves discrete behaviours that can be intentional or unintentional but can cause harm (Jones et al., 2016). In the current study, I add incivility, which is psychological mistreatment that is not necessarily conscious or intentional (Cortina et al., 2001). Similarly, to extend stigma theory with concepts from expectancy violations theory, I propose to include positive outcomes. Again, I include interpersonal fairness which comprises polite and respectful treatment (Colquitt & Rodell, 2015), while adding help seeking which refers to the willingness or likelihood to seek help from someone (Nadler et al., 2006).

Taken together, I propose that observers will try to separate themselves from colleagues that they perceive as risky (i.e., a negative stereotype), and will behave toward them in ways that constitute status loss and discrimination. Specifically, observers will treat colleagues they perceive as risky with greater ostracism, subtle discrimination, and incivility. In contrast, observers will involve themselves more with colleagues that they perceive as artistic (i.e., a positive stereotype), and behave in ways that signal status gain and respect towards these colleagues. Specifically, observers will treat colleagues perceived as artistic with more inclusion, interpersonal fairness, and help seeking. Based on theory and the results of Study 1, I hypothesize:

Hypothesis 7: Workers perceived as risky compared to those perceived as artistic (H7a) or a good worker (H7b) will experience more subtle discrimination, incivility, and ostracism.

Hypothesis 8: Workers perceived as artistic compared to those perceived as a good worker will experience less subtle discrimination, incivility, and ostracism.

Hypothesis 9: Workers perceived as risky compared to those perceived as artistic (H9a) or a good worker (H9b) will experience less interpersonal fairness, inclusion, and help seeking.

Hypothesis 10: Workers perceived as artistic compared to those perceived as a good worker will experience more interpersonal fairness, inclusion, and help seeking.

Gender as a Moderator

Study 1 found no meaningful gender moderation for the indirect effects of dark or light tattoo content on treatment of tattooed colleagues, namely subtle discrimination and interpersonal fairness, through stereotypes (i.e., perceptions of competence, trustworthiness, artisticness, and riskiness). However, for Study 2, I again manipulate gender, namely whether the worker is presented as a woman or a man, to test whether the direct effects of perceived riskiness and artisticness on treatment differ as a function of the worker's gender. Below, I discuss the moderating role of gender for each perception, namely riskiness and artisticness, in turn.

First, considering the ideal worker norm (Acker, 1990; Reid, 2015), and perceived riskiness being a negative violation of this expectation, we might expect the effects for perceived riskiness on treatment from observers to depend on congruity with gender based on social role and role congruity theories (Eagly, 1987; Eagly & Karau, 2002). Perceived riskiness can be considered congruent with masculinity (e.g., Byrnes et al., 1999). As such, perceiving men as risky would be gender congruent, whereas perceiving women as risky would be gender incongruent. I propose that gender incongruence will amplify the negative expectancy violation for perceived riskiness, such that perceived riskiness will result in more negative treatment and less positive treatment for women perceived as risky compared to men perceived as risky. Specifically, I hypothesize:

Hypothesis 11: Gender will moderate the effects of perceived riskiness such that women perceived as risky will be treated with more subtle discrimination, incivility, and ostracism, and less interpersonal fairness, inclusion, and help seeking compared to men perceived as risky.

Second, perceived artisticness is not clearly gendered in the same way as perceived riskiness. Conceptual discussions and empirical findings suggest that artisticness can be considered masculine or feminine. There is some research supporting creativity as a masculine characteristic (e.g., Proudfoot et al., 2015); however, the gendered aspect of perceived artisticness can be context-dependent (e.g., Kim et al., 2024). For example, recent meta-analytic findings suggest a dual pathway model between gender and creativity, with both a masculine and feminine mediational path linking gender to creativity (Kim et al., 2024). Further, Ruggs and Hebl (2022) found no significant gender main effects (nor significant interactions of gender and tattoo presence) on perceived artisticness. Given the lack of a clear gendered aspect for perceived artisticness, I include the question of whether gender moderates for the effects of perceived artisticness on treatment from observers as an exploratory research question.

> ***Research Question 3:*** Will gender moderate the effects of perceived artisticness on subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking?

Study 2 Pilot Studies

Before proceeding with the full study, I conducted pilot studies to test the construct validity of the vignettes, specifically to ensure the descriptions capture riskiness and artisticness as intended.

Pilot Study 1

The goal of this pilot study was to test the vignettes for Study 2 to ensure the manipulations capture perceptions of riskiness and artisticness, which is a necessary step for establishing construct validity (Shadish et al., 2002) before continuing with the main study.

Participants

I recruited 500 participants from the SONA research portal for undergraduate business students in an undergraduate Commerce program. The final sample size was 405 after removing incomplete responses (n = 8), those who chose to withdraw their data (n = 5), those who failed the attention check (n = 42), and those who failed the gender manipulation check (n = 40). Participants had a mean age of 19.45 years (SD = 1.81), with 57.5% identifying as women, 41.5% identifying as men, 0.2% did not identify with the gender binary, and 0.7% preferred not to disclose information concerning their gender.

Procedure

Those students who were interested were first presented with the letter of information, and if they consented, they were able to proceed to the survey. At the beginning of the survey, they were randomly presented with one of the six vignettes (see Appendix G1). After they read the vignette, they were asked to complete two measures: (1) perceptions of riskiness (α = .91), and (2) perceptions of artisticness (α = .91), which were presented in a random order. They were also asked the gender of the worker. Finally, they were asked to fill out demographic questions. See Appendix H for the full list of survey items.

Analytic Procedures

I used SPSS version 28 to conduct three analyses to test my manipulations and ensure construct validity (Shadish et al., 2002). I conducted (1) Chi-square tests to check if the gender manipulation worked, (2) one-way ANOVA to test construct validity of the stereotype manipulations, i.e., perceived riskiness and artisticness, and (3) independent samples t-tests to compare the risky and artistic manipulations to determine if the vignettes provide a fair comparison (Cooper & Richardson, 1986) of these two tattoo-specific stereotypes.

Results

First, I tested the gender manipulation[9] with Chi-square tests. Half of the participants were presented with a gender-neutral name, Taylor, in the vignettes. Data collection was paused halfway through to check the integrity of the data collection process, and at that point, upon further reflection and to strengthen the gender manipulation, the remaining half of participants were presented with gendered names, Tanya for the woman and Tanner for the man. I conducted separate Chi-square tests, and the gender manipulation was successful. Participants were able to correctly identify the gender of the worker in the vignette with the gender-neutral name, χ^2 (1, N = 201) = 113.00, $p < .001$, and the gendered names, χ^2 (1, N = 244) = 194.77, $p < .001$. Combining all the data, participants were again able to correctly identify the gender of the worker in the vignette, which indicates the gender manipulation was successful, χ^2 (1, N = 445) = 302.94, $p < .001$.

Second, to test the construct validity of the risky and artistic manipulations, I conducted one-way ANOVA tests. The results show there were significant differences between the vignettes for ratings of perceived riskiness (F (2, 402) = 416.63, $p < .001$) and artisticness (F (2, 402) = 148.98, $p < .001$). A Tukey post hoc test showed that the worker described as risky was rated higher on perceived riskiness (M = 4.05, SD = .75) than the worker described as artistic (M = 2.20, SD = .72) or a good worker (M = 1.61, SD = .70). Similarly, the worker described as artistic was rated higher on perceived artisticness (M = 4.32, SD = .63) than the worker described as risky (M = 3.04, SD = .73) or a good worker (M = 3.02, SD = .78).

Finally, to test for a fair comparison (Cooper & Richardson, 1986), that is whether the manipulations are of equivalent strength, I conducted an independent samples t-test to compare

[9] Those that answered incorrectly (n = 40) were removed from the data prior to testing whether the manipulations for perceptions of riskiness and artisticness worked.

the mean of riskiness for the risky manipulation to the mean of artisticness for the artistic manipulation. The results suggested that the manipulations were not equivalent in strength, $t(275) = -3.18$, $p = .002$. Specifically, the artistic manipulation was stronger ($M_{artisticness} = 4.32$, $SD = .63$) than the risky manipulation ($M_{riskiness} = 4.05$, $SD = .75$).

Discussion

The results suggest that the gender and tattoo-specific stereotype manipulations were successful, which supports construct validity (Shadish et al., 2002). However, the tattoo-specific stereotype manipulations potentially provide an unfair comparison. As such, I strengthened both the risky and artistic worker descriptions by incorporating some additional descriptive language, such as "recklessness" in the risky manipulation and "fashionably" in the artistic manipulation. See Appendix G1 for original versions and G2 for the revised versions.

Pilot Study 2

As a result of Pilot Study 1, I revised the risky and artistic manipulations in an effort to make it more of a fair comparison, and conducted the same three tests as in Pilot Study 1. See Appendix G2 for the revised versions.

Participants

I recruited 200 participants from Prolific.com. After removing those who chose to withdraw ($n = 2$), those who responded incorrectly to the attention check question ($n = 2$), and those that failed the gender manipulation check ($n = 5$), the final sample was 191. Among participants in the final sample, 103 (53.9%) identified as women, 86 (45.0%) identified as men, 2 (1.0%) did not identify with the gender binary, with a mean age of 37.33 years ($SD = 12.18$).

Procedure

The procedure was the same as the initial pilot with the exception being the updated vignettes in Appendix G2. The measures of perceived riskiness ($\alpha = .93$) and perceived artisticness ($\alpha = .94$) again showed good reliability.

Analytic Procedures

The analytic procedures were the same as Study 2 Pilot Study 1 above.

Results

I first tested the gender manipulation. The results show that participants were able to correctly identity the gender of the worker described in the vignette, χ^2 (1, N = 196) = 176.94, $p <$ .001, which means the gender manipulation was successful.

Second, I conducted a one-way ANOVA to test the risky and artistic manipulations. The results showed significant differences between the vignettes for ratings of perceived riskiness (F (2, 187) = 231.64, $p < .001$) and artisticness (F (2, 188) = 85.21, $p < .001$). The worker described as risky (M = 4.14, SD = .74) was rated higher on perceived riskiness than the worker described as artistic (M = 1.86, SD = .65) or a good worker (M = 1.57, SD = .80). Similarly, the worker described as artistic (M = 4.48, SD = .57) was rated higher on perceived artisticness than the worker described as risky (M = 2.93, SD = .95) or a good worker (M = 3.03, SD = .72).

Last, to test whether the manipulations constitute a fair comparison (Cooper & Richardson, 1986), I compared the mean rating of perceived riskiness for the risky manipulation to the mean rating of perceived artisticness for the artistic manipulation with an independent samples t-test. Again, the manipulations were not equivalent, t(127) = -2.93, p = .004, with the artistic manipulation ($M_{artisticness}$ = 4.48, SD = .57) stronger than the risky manipulation ($M_{riskiness}$ = 4.14, SD = .74).

Discussion

Again, the vignettes were perceived as intended – establishing construct validity (Shadish et al., 2002), but the risky and artistic descriptions were not equally as strong. However, given that they are different constructs, the likelihood of achieving a fair comparison is questionable, and the goal here was to minimize the magnitude of any unfair comparison. As such, I proceeded with the main study.

Main Study 2

Method

Participants were recruited from Prolific.com, all of whom were residing in the United States, and did not participate in Study 1. After reviewing the letter of information and consenting to participate in the study, participants were randomly assigned to one of the conditions in a 3 (tattoo-specific stereotype: riskiness vs. artisticness vs. good worker comparison) x 2 (gender: woman vs. man) between-subjects design. For each participant, after reading the vignette, there was the same email writing task as in Study 1, which was later rated by the same trained RAs to capture externally-rated subtle discrimination and interpersonal fairness, and measures for all self-reported outcomes, namely subtle discrimination, interpersonal fairness, incivility, ostracism, inclusion, and help seeking – with the measures presented in a random order. The survey concluded with demographic items (see Appendix G2 for vignettes and Appendix I for full list of survey items).

Participants

I recruited 300 participants from Prolific.com in the United States. The final sample consisted of 279 participants after removing 17 for failing the gender manipulation check question, two chose to withdraw, and two showed inattention by incorrectly completing the email

task (namely, entering an email address instead of writing a response to the email). Seven participants failed one attention check question; however, they all answered the other two attention check questions correctly and their responses were retained. Participants' average age was 34.72 years (*SD* = 10.52), 139 (49.8%) identified as women, 136 (48.7%) identified as men, 3 (1.1%) did not identify with the gender binary, and 1 (0.4%) preferred not to disclose information concerning their gender. On average, participants worked 37.62 hours per week (*SD* = 13.87).

Measures

See Appendix I for full list of survey items.

Externally-rated Subtle Discrimination and Interpersonal Fairness. I used the same email writing task (Scanlon, 2025) as in Study 1, with the only difference being the name of the fictional worker (see below).

> Good morning,
>
> I was wondering if you would be able to help me with a project I am working on? It would require meeting a few times over the coming weeks and putting together some documents that will be presented at my next meeting with the client. I will also need help getting through some of the transcripts from the most recent round of interviews.
>
> I realize you have a lot on your plate right now and that quarterly deadlines are approaching, but if you are able to provide assistance, it would be greatly helpful.
>
> Please let me know at your earliest convenience so we can set up a time to meet if need be.
>
> Thank you,
>
> **Tanya/Tanner Smith**

The same trained RAs from Study 1 coded the email responses. Inter-rater reliability was acceptable with average measure ICC [2] = .884 for subtle discrimination and average measure ICC [2] = .960 for interpersonal fairness.

Self-report Subtle Discrimination. I used the same measure as in Study 1.

Self-report Interpersonal Fairness. I used the same measure as in Study 1.

Self-report Incivility. Incivility was measured using Cortina et al.'s (2001) seven item measure with each item rated from 1 = *never* to 5 = *always*. An example item is "Make unwanted attempts to draw her/him into a discussion of personal matters."

Self-report Ostracism. Ferris et al.'s (2008) 10-item measure was used to capture ostracism, with each item rated from 1 = *never* to 5 = *always* (e.g., "Her/his greetings would go unanswered at work.")

Self-report Inclusion. I used Mor-Barak & Cherin's (1998) Inclusion/Exclusion Work Group Involvement measure with six items rated from 1 = *strongly disagree* to 5 = *strongly agree*. Items were coded to reflect work group inclusion, with an example item being "Work group members would make her/him feel a part of decisions."

Self-report Help Seeking. Help seeking was measured with one item from Nadler et al. (2006). Participants were asked to "Please rate the extent to which you would approach Tanya/Tanner for help if you were having difficulty on a work assignment"; this item was rated from 1 = *never* to 10 = *a lot*.

Analytic Procedures

Before testing the hypotheses, I computed a measurement model using CFA in R (Version 4.4.2; R Core Team, 2024) with RStudio (RStudio Team, 2024) using the lavaan package (Rosseel, 2012) to assess the construct validity of the outcomes. I contrasted three different sets of models: (a) an eight-factor model (i.e., each outcome comprises a separate index) with a two-factor model separating the negative outcomes (i.e., self-report and external-rated subtle discrimination, incivility, and ostracism) and positive outcomes (i.e., self-report and external-

rated interpersonal fairness, inclusion, and help seeking), which would reflect item wording. (b) I also compared the eight-factor model to a two-factor model separating the self-reported outcomes (i.e., subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking) and the externally-rated outcomes (i.e., subtle discrimination and interpersonal fairness), which would reflect method bias. (c) Finally, I compared the eight-factor model to a one-factor model combining all factors, which would reflect inadequate explication of constructs. I evaluated fit with indices recommended in a recent review of the confirmatory factor analysis literature (Howard et al., 2025), see Table 3.2 for an overview of the recommended ranges of each goodness of fit index.

For hypothesis testing, analyses were conducted in SPSS version 28. Specifically, to test the direct effects of the tattoo-specific stereotype manipulations on outcomes, I conducted a MANOVA to examine the multivariate effect of the tattoo-specific stereotype manipulations (i.e., perceived riskiness and artisticness) on the outcomes, which I followed by a series of one-way ANOVAs for each outcome, and Tukey post hoc tests to assess the differences among the tattoo-specific stereotype manipulations in their effects on each outcome. For the gender moderation analyses, I used the PROCESS macro v.4.1 (Hayes, 2022), with the multi-categorical predictor option because the predictor has three categories (i.e., perceived riskiness, perceived artisticness, and a good worker comparison).

Results

Confirmatory Factor Analysis

The results from the confirmatory factor analyses show an adequate fit with the eight-factor model: χ^2 (1512) = 4173.93, $p < .001$, CFI = 0.82, TLI = 0.81, RMSEA = 0.08 [90% CI: 0.08, 0.08], SRMR = 0.06. While the CFI and TLI were below, and RMSEA was above,

recommended cutoff values, the SMSR is within the recommended values (Hu & Bentler, 1999). However, the model fit is not as bad as we might initially think based on the ranges outlined by Howard et al. (2025), which show the CFI and TLI suggest a weak model fit, RMSEA suggests weak to moderate model fit, and SRMR suggests a moderate model fit.

In contrast, the fit was not adequate for the two-factor model separating positive and negative outcomes: χ^2 (1538) = 10171.89, $p < .001$, CFI = 0.40, TLI = 0.38, RMSEA = 0.14 [90% CI: 0.14, 0.15], SRMR = 0.19, or the two-factor model separating self-reported and externally-rated outcomes: χ^2 (1538) = 6786.42, $p < .001$, CFI = 0.64, TLI = 0.62, RMSEA = 0.11 [90% CI: 0.11, 0.11], SRMR = 0.09. The fit was also not adequate for the one-factor model: χ^2 (1539) = 10472.93, $p < .001$, CFI = 0.38, TLI = 0.36, RMSEA = 0.15 [90% CI: 0.14, 0.15], SRMR = 0.19.

I then compared the fit indices of the eight- vs two- and one-factor models using chi-square difference tests (Howard et al., 2025). The eight-factor model provided a significantly better fit to the data than the two-factor model separating positive and negative outcomes ($\Delta \chi^2$ (26) = 5998.0, $p < .001$), the two-factor model separating self-reported and externally-rated outcomes ($\Delta \chi^2$ (26) = 2612.5, $p < .001$), or one-factor model ($\Delta \chi^2$ (27) = 6299.0, $p < .001$). Overall, the CFA results for my hypothesized eight-factor model suggests a weak (CFI and TLI) to moderate or strong (RMSEA and SRMR) model fit, and this model has a significantly better fit than plausible two- or one-factor models. As such, I proceeded with analyzing each outcome separately for hypothesis testing.

Hypothesis Testing

See Table 4.1 for means, standard deviations, and reliabilities of the study variables, and Table 4.2 for correlations among the study variables.

Table 4.1

Means, Standard Deviations, and Reliabilities for Study 2 Variables

Variables	*M*	*SD*	*Reliabilities* [a]
1. Participant gender	.51	.50	
2. Participant age	34.72	10.52	
3. Risky perception condition	.33	.47	
4. Artistic perception condition	.33	.47	
5. Good worker condition	.34	.47	
6. Gender condition	.49	.50	
5. Subtle discrimination (self-report)	1.68	.84	.93
6. Subtle discrimination (externally-rated)	1.63	.88	.88
7. Incivility (self-report)	1.38	.64	.91
8. Ostracism (self-report)	1.56	.68	.94
9. Interpersonal fairness (self-report)	4.61	.58	.92
10. Interpersonal fairness (externally-rated)	4.22	1.25	.96
11. Inclusion (self-report)	3.88	.91	.88
12. Help seeking (self-report)	6.85	2.70	

Note. N = 275-279. Participant gender and gender condition are dummy coded such that men = 0 and women = 1. [a]All reliabilities are alphas except for the externally-rated subtle discrimination and interpersonal fairness external, which are average measure ICC[2]. Higher scores indicate more of the variable.

Table 4.2
Correlations for Study 2 Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Participant gender													
2. Participant age	.16**												
3. Risky perception condition	-.16	.01											
4. Artistic perception condition	.06	.02	-.49**										
5. Good worker condition	.09	-.03	-.50**	-.51**									
6. Gender condition	.02	-.004	.04	-.02	-.02								
7. Subtle discrimination (self-report)	-.12	.03	.48**	-.22**	-.26**	-.001							
8. Subtle discrimination (externally-rated)	-.04	-.06	-.10	.05	.06	.05	-.01						
9. Incivility (self-report)	-.17**	-.12*	.32**	-.15*	-.17**	.02	.56**	-.04					
10. Ostracism (self-report)	-.13*	.05	.52**	-.25**	-.27**	-.02	.67**	-.002	.65**				
11. Interpersonal fairness (self-report)	.25**	.06	-.29**	.16**	.13*	.004	-.56**	.07	-.61**	-.54**			
12. Interpersonal fairness (externally-rated)	.01	.03	.11	-.03	-.08	-.09	.08	-.81**	-.13*	.09	-.14*		
13. Inclusion (self-report)	.17**	-.02	-.60**	.33**	.27**	-.01	-.62**	.04	-.47**	-.70**	.43**	-.10	
14. Help seeking (self-report)	.12	-.06	-.56**	.22**	.34**	.03	-.68**	.04	-.33**	-.57**	.39**	-.06	.65**

Note. N = 275-279. Participant gender and gender condition are dummy coded with men = 0 and women = 1.
* $p < .05$, ** $p < .01$.

Direct Effects Results. To test Hypotheses 7-10, I conducted a MANOVA with 5,000 bootstrap samples. For the MANOVA, I included the tattoo-specific stereotype manipulation, namely perceived riskiness, perceived artisticness, and the good worker comparison, as the independent variable, and subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking as the dependent variables. Based on the Wilks' lambda F statistic, the effects were significant, $\lambda = .56$, $F\ (16, 532) = 11.37$, $p < .001$, partial $\eta 2 = .26$.

As a result, I conducted a series on one-way ANOVAs to examine the specific effects of the tattoo-specific stereotype manipulations (i.e., perceived riskiness, perceived artisticness, and the good worker comparison) on each outcome. The manipulations of perceived riskiness, perceived artisticness, and the good worker comparison significantly predicted all of the self-report outcomes, namely subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking, but not the externally-rated subtle discrimination or interpersonal fairness. See Table 4.3 for the results for each outcome.

Table 4.3
ANOVA Results: Study 2 (Hypotheses 7-10)

	ANOVA Results		
Outcomes	*F* (2, 276)	*p*	η2
Subtle Discrimination (SR)	43.33	<.001	.24
Subtle Discrimination (ER)	1.52	.22	.01
Incivility (SR)	15.22	<.001	.10
Ostracism (SR)	50.96	<.001	.27
Interpersonal Fairness (SR)	13.63	<.001	.09
Interpersonal Fairness (ER)	1.94	.15	.01
Inclusion (SR)	79.70	<.001	.37
Help Seeking (SR)	64.51	<.001	.32

Note. N = 276. SR = self-report. ER = external-rated.

Finally, I conducted Tukey post hoc tests to further assess the effects of each tattoo-specific stereotype manipulation, namely perceived riskiness, perceived artisticness, and a good worker comparison, on each outcome, thereby addressing my Hypotheses 7-10. See Table 4.4 for Tukey post hoc test results and Table 4.5 for means and standard deviations of each tattoo-specific stereotype manipulation on each outcome.

First, Hypotheses 7a and 7b are partially supported. Workers perceived as risky were likely to be treated with more self-reported subtle discrimination, incivility, and ostracism compared to workers perceived as artistic or a good worker, which supports Hypotheses 7a and 7b. However, there were no differences between workers perceived as risky and those perceived as artistic or a good worker in externally-rated subtle discrimination, which does not support Hypotheses 7a or 7b.

Second, Hypothesis 8 was not supported as workers perceived as artistic were not significantly different than a good worker for either self-reported or externally-rated subtle discrimination, incivility, or ostracism.

Third, Hypotheses 9a and 9b were partially supported. Supporting Hypotheses 9a and 9b, workers perceived as risky were likely to be treated with less self-reported interpersonal fairness, inclusion, and help seeking than workers perceived as artistic or a good worker. However, there were no differences between workers perceived as risky and those perceived as artistic or a good worker for externally-rated interpersonal fairness, which does not support either Hypotheses 9a or 9b. Finally, Hypothesis 10 was not supported: Workers perceived as artistic did not experience significantly different self- or externally-rated interpersonal fairness, inclusion, and help seeking than a good worker.

Table 4.4
Tukey Post hoc Results: Study 2 (Hypotheses 7-10)

	Risky vs Artistic			Risky vs Good Worker			Artistic vs Good Worker		
Outcomes	*M* Difference	*p*	95% CIs	*M* Difference	*p*	95% CIs	*M* Difference	*p*	95% CIs
Subtle Discrimination (SR)	.846	<.001	.591, 1.101	.893	<.001	.639, 1.146	.046	.902	-.207, .300
Subtle Discrimination (ER)	-.196	.290	-.504, .111	-.197	.283	-.502, .108	-.0002	1.00	-.305, .305
Ostracism (SR)	.742	<.001	.538, .946	.765	<.001	.563, .967	.023	.961	-.179, .225
Incivility (SR)	.419	<.001	.205, .633	.444	<.001	.232, .656	.025	.959	-.187, .237
Interpersonal Fairness (SR)	-.387	<.001	-.581, -.193	-.353	<.001	-.546, -.161	.034	.910	-.159, .226
Interpersonal Fairness (ER)	.264	.333	-.174, .702	.350	.141	-.085, .785	.086	.887	-.348, .521
Inclusion (SR)	-1.22	<.001	-1.472, -.964	-1.132	<.001	-1.384, -.880	.086	.700	-.166, .338
Help Seeking (SR)	-3.03	<.001	-3.81, -2.25	-3.42	<.001	-4.20, -2.65	-.39	.459	-1.17, .38

Note. $N = 276$. SR = self-report. ER = external-rated.

Table 4.5

Means and Standard Deviations for Outcomes by Tattoo-specific Stereotype Manipulation

	Manipulation					
	Risky		Artistic		Good Worker	
Outcomes	*M*	*SD*	*M*	*SD*	*M*	*SD*
Subtle Discrimination (SR)	2.26	0.91	1.41	0.63	1.37	0.62
Subtle Discrimination (ER)	1.50	0.75	1.70	0.95	1.70	0.93
Incivility (SR)	1.67	0.76	1.25	0.57	1.23	0.48
Ostracism (SR)	2.06	0.77	1.32	0.51	1.30	0.41
Interpersonal Fairness (SR)	4.37	0.67	4.76	0.47	4.73	0.51
Interpersonal Fairness (ER)	4.42	1.11	4.16	1.35	4.07	1.29
Inclusion (SR)	3.09	0.87	4.31	0.65	4.23	0.64
Help Seeking (SR)	4.69	2.48	7.73	2.35	8.12	1.84

Note. $N = 276$. SR = self-report. ER = external-rated.

Gender Moderation Results. To test Hypothesis 11 and Research Question 3, I used the Hayes' (2022) PROCESS macro for SPSS. With the good worker condition as the comparison group, the results showed no significant interactions of gender with perceived riskiness or artisticness for any of the outcomes. As such, gender did not moderate any of the direct effects of the tattoo-specific stereotype manipulations, i.e., perceived riskiness or artisticness, on outcomes, providing no support for Hypothesis 11 nor Research Question 3. See Table 4.6 for the full gender moderation results.

Summary of Results: Study 2

For Study 2, I tested Hypotheses 7-10 for direct effects of tattoo-specific stereotypes, namely perceived riskiness and artisticness, on treatment from colleagues, both negative (externally-rated and self-report subtle discrimination, incivility, and ostracism) and positive (externally-rated and self-report interpersonal fairness, inclusion, and help seeking). In addition, I explored the moderating role of gender in the direct effects of tattoo-specific stereotypes on treatment from colleagues, testing Hypothesis 11 and Research Question 3. Summaries of the results for each of my Hypotheses and Research Question can be found in Tables 4.7 and 4.8, respectively.

Table 4.6
Gender Moderation of Tattoo-specific Stereotypes on Outcomes: Study 2 (RQ 3)

Outcome Variable	Predictor	*b*	*SE*	*p*	95% CI
Subtle Discrimination (SR)	Risky vs GW	.638	.343	.064	-.037, 1.313
	Artistic vs GW	-.161	.346	.643	-.842, .520
	Gender	-.064	.151	.673	-.362, .234
	Risky × Gender	.161	.216	.458	-.265, .587
	Artistic × Gender	.133	.216	.537	-.291, .558
Subtle Discrimination (ER)	Risky vs GW	-.670	.411	.104	-1.479, .140
	Artistic vs GW	-.275	.414	.507	-1.091, .541
	Gender	-.253	.182	.165	-.611, .105
	Risky × Gender	.311	.259	.231	-.199, .820
	Artistic × Gender	.173	.257	.503	-.334, .680
Incivility (SR)	Risky vs GW	.211	.285	.459	-.349, .771
	Artistic vs GW	-.140	.287	.626	-.705, .425
	Gender	-.088	.126	.486	-.335, .160
	Risky × Gender	.154	.180	.392	-.199, .508
	Artistic × Gender	.104	.179	.561	-.248, .456
Ostracism (SR)	Risky vs GW	.429	.271	.115	-.105, .962
	Artistic vs GW	-.415	.274	.130	-.954, .123
	Gender	-.117	.120	.331	-.352, .119
	Risky × Gender	.218	.171	.205	-.119, .554
	Artistic × Gender	.283	.171	.099	-.053, .618
Interpersonal Fairness (SR)	Risky vs GW	-.128	.260	.623	-.640, .384
	Artistic vs GW	.406	.262	.122	-.110, .922
	Gender	.112	.115	.330	-.114, .338
	Risky × Gender	-.144	.164	.382	-.466, .179

Outcome Variable	Predictor	*b*	*SE*	*p*	95% CI
	Artistic × Gender	-.250	.163	.127	-.571, .072
Interpersonal Fairness (ER)	Risky vs GW	1.140	.583	.051	-.007, 2.288
	Artistic vs GW	.490	.587	.405	-.667, 1.646
	Gender	.501	.258	.053	-.006, 1.007
	Risky × Gender	-.517	.367	.160	-1.239, .206
	Artistic × Gender	-.260	.365	.478	-.978, .459
Inclusion (SR)	Risky vs GW	-1.162	.341	.001	-1.833, -.490
	Artistic vs GW	.034	.344	.922	-.643, .711
	Gender	-.047	.151	.755	-.343, .249
	Risky × Gender	.028	.215	.898	-.396, .451
	Artistic × Gender	.036	.214	.866	-.385, .458
Help Seeking (SR)	Risky vs GW	-3.305	1.044	.002	-5.361, -1.250
	Artistic vs GW	-1.319	1.053	.211	-3.391, .754
	Gender	-.456	.461	.324	-1.363, .452
	Risky × Gender	-.093	.659	.888	-1.389, 1.204
	Artistic × Gender	.577	.655	.380	-.713, 1.867

Note. *N* =278. SR = self-report. ER = external-rated. GW = good worker reference group. CI = Confidence Interval.

Table 4.7
Summary of Hypotheses and Results: Study 2

Hypotheses		Support for Hypothesis?
***Hypothesis 7*:**	Workers perceived as risky compared to those perceived as artistic (H7a) or a good worker (H7b) will experience more subtle discrimination, incivility, and ostracism.	Partially supported: • 7a and 7b supported for self-report subtle discrimination, incivility, and ostracism. • 7a and 7b not supported for externally-rated subtle discrimination.
***Hypothesis 8*:**	Workers perceived as artistic compared to those perceived as a good worker will experience less subtle discrimination, incivility, and ostracism.	Not supported
***Hypothesis 9*:**	Workers perceived as risky compared to those perceived as artistic (H9a) or a good worker (H9b) will experience less interpersonal fairness, inclusion, and help seeking.	Partially supported: • 9a and 9b supported for self-report interpersonal fairness, inclusion, and help seeking. • 9a and 9b not supported for externally-rated interpersonal fairness.
***Hypothesis 10*:**	Workers perceived as artistic compared to those perceived as **a** good worker will experience more interpersonal fairness, inclusion, and help seeking.	Not supported
Hypothesis 11:	Gender will moderate the effects of perceived riskiness such that women perceived as risky will be treated with more subtle discrimination, incivility, and ostracism, and less interpersonal fairness, inclusion, and help seeking compared to men perceived as risky.	Not supported

Table 4.8
Summary of Research Question and Results: Study 2

Research Questions		**Findings**
Research Question 3:	Will gender moderate the effects of perceived artisticness on subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking?	No significant gender moderation

Discussion

For Study 2, I conducted a randomized experimental study using vignettes in which I manipulated perceptions of workers, namely the tattoo-specific stereotypes of perceived riskiness and artisticness, and assessed colleagues' treatment of these workers. In terms of colleagues' treatment, participants completed an email writing task that was coded by trained RAs to capture externally-rated subtle discrimination and interpersonal fairness, and I measured self-reported subtle discrimination, ostracism, and incivility (negative outcomes), as well as interpersonal fairness, inclusion, and help seeking (positive outcomes). This study is an important step for enabling me to make causal inferences regarding the direct effects of tattoo-specific stereotypes on observer treatment of colleagues, which is the second path for mediation in my conceptual model (Figure 1.1).

The results provide support for some of my hypotheses, namely the results partially support hypotheses regarding outcomes for workers perceived as risky (Hypotheses 7 and 9), but do not support those for workers perceived as artistic (Hypotheses 8 and 10). These findings provide support for the effects of perceived riskiness on self-reported negative treatment, with workers perceived as risky being treated with more subtle discrimination (self-reported but not externally-rated), ostracism, and incivility compared to those perceived as artistic or a good worker. In addition, the findings show effects of perceived riskiness on self-report positive treatment, with workers perceived as risky being treated with less interpersonal fairness (self-reported but not externally-rated), inclusion, and help seeking compared to those perceived as artistic or a good worker. There were no differences for the effects of perceived artisticness on either negative or positive treatment when compared to a good worker.

The significant results for the risky manipulation, along with the non-significant results for the artistic manipulation, are perhaps not surprising considering negativity bias (Skowronski & Carlston, 1987, 1989) and the idea that bad is stronger than good (Baumeister et al., 2001). Negative stereotypes are quicker to form, longer lasting, and more influential in observer reactions, than are positive stereotypes (Baumeister et al., 2001; Skowronski & Carlston, 1987, 1989). As such, the finding that perceived riskiness significantly affected colleagues' treatment, while perceived artisticness did not affect colleagues' treatment, is an example of the negativity bias and the negative effects of bad stimuli, events or experiences being stronger than good.

The findings of Study 2 contribute to our understanding of tattoo-specific stereotypes and how they influence observer treatment towards tattooed colleagues. By manipulating tattoo-specific stereotypes and assessing the effects of these stereotypes on colleagues' treatment, we can make causal inferences regarding the effects of these tattoo-specific stereotypes on colleagues' treatment. In addition, the findings contribute to stigma research by isolating the effects of context-specific stereotype perceptions on observer treatment of individuals with stigmatized characteristics, and emphasizing the importance of examining context-specific stereotypes. In addition, all of the self-reported outcomes tested, namely subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking, were significantly affected by the risky manipulation, which suggests these outcomes should all be further examined as treatment from observers following context-specific stereotypes of stigmatized characteristics.

Strengths and Limitations

There are several strengths and limitations in Study 2. First, Study 2 expands the negative treatment beyond subtle discrimination to include incivility and ostracism, and expands positive

treatment beyond interpersonal fairness to add inclusion and help seeking, and there were significant effects for the risky manipulation on all of the self-report outcomes measured. These additions and findings reduce mono-operation bias that could be a concern with using one operationalization of each negative and positive treatment (Shadish et al., 2002).

Second, due to the experimental design, the significant findings allow for stronger causal inferences about the indirect effects (mediation) model from Study 1 with tattoo content relating to observer treatment of tattooed colleagues through tattoo-specific stereotypes, namely perceptions of riskiness and artisticness, which adds to the importance of focusing on context-specific stereotypes in stigma research.

Third, Pilot Study 2 found that the risky and artistic manipulations were not a fair comparison (Cooper & Richardson, 1986), with the results suggesting that the risky manipulation was not as strong as the artistic manipulation. However, the findings from the main Study 2 showed significant results for the risky manipulation but not the artistic manipulation. As such, this mitigates concerns regarding an unfair comparison.

Motivation for Study 3

Taken together, Studies 1 and 2 provide experimental support for causal inferences about the indirect effects from my conceptual model (Figure 1.1), namely the indirect effects of tattoo content on treatment from colleagues through tattoo-specific stereotypes. Accordingly, for Study 3, I conduct a field survey to replicate findings from Studies 1 and 2, and extend to a different method, which addresses concerns of mono-method bias (Shadish et al., 2002). Specifically, I test my conceptual model using a field survey with participants who work with a tattooed colleague. As such, Study 3 provides insight into whether these perceptions of tattooed colleagues are present in actual workplaces, and when there are pre-existing relationships

between observers and the tattooed colleagues. In addition, I again explore the moderating role of hierarchical position and add industry type as an exploratory moderator in the indirect relationships between dark and light tattoo content and treatment from observers, namely subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking, through stereotypes, namely perceptions of competence, trustworthiness, artisticness, and riskiness.

References

Acker, J. (1990). Hierarchies, jobs, bodies: A theory of gendered organizations. *Gender & Society*, *4*(2), 139-158.

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323-370.

Burgoon, J.K. (2015). Expectancy violations theory. In Berger, C.R., Roloff, M.E., Wilson, Dillard, J.P., Caughlin, J., & Solomon, D. (Eds.), *The international encyclopedia of interpersonal communication*. Wiley.

Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communications Monographs, 55*(1), 58-79.

Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk taking: A meta-analysis. *Psychological Bulletin*, *125*(3), 367-383.

Cooper, W. H., & Richardson, A. J. (1986). Unfair comparisons. *Journal of Applied Psychology*, *71*(2), 179-184.

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, *6*(1), 64-80.

Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Lawrence Erlbaum.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*(3), 573.

Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the Workplace Ostracism Scale. *Journal of Applied Psychology*, *93*(6), 1348-1366.

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Publications.

Howard, M. C., Boudreaux, M., Cogswell, J., Manix, K. G., & Oglesby, M. T. (2025). A literature review of model fit and model comparisons with confirmatory factor analysis: Formalizing the informal in organizational science. *Applied Psychology*, *74*(1), e12592.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1-55.

IBM Corp. (2021). *IBM SPSS Statistics for Mac* (Version 28.0). IBM Corp.

Jones, K. P., Peddie, C. I., Gilrane, V. L., King, E. B., & Gray, A. L. (2016). Not so subtle: A meta-analytic investigation of the correlates of subtle and overt discrimination. *Journal of Management, 42(6),* 1588-1613.

Kim, J. J., Vaulont, M. J., Zhang, Z., & Byron, K. (2024). Looking inside the black box of gender differences in creativity: A dual-process model and meta-analysis. *Journal of Applied Psychology, 109*(12), 1861–1900.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*(1), 363-385.

Marmot, M. (2005). *Status syndrome: How your social standing directly affects your health*. A&C Black.

Mor-Barak, M. E., & Cherin, D. A. (1998). A tool to expand organizational understanding of workforce diversity: Exploring a measure of inclusion-exclusion. *Administration in Social Work*, *22*(1), 47-64.

Nadler, A., Ellis, S., & Bar, I. (2003). To seek or not to seek: The relationship between help seeking and job performance evaluations as moderated by task-relevant expertise. *Journal of Applied Social Psychology*, *33*(1), 91-109.

Pirlott, A. G., & MacKinnon, D. P. (2016). Design approaches to experimental mediation. *Journal of Experimental Social Psychology*, *66*, 29-38.

Proudfoot, D., Kay, A. C., & Koval, C. Z. (2015). A gender bias in the attribution of creativity: Archival and experimental evidence for the perceived association between masculinity and creative thinking. *Psychological Science*, *26*(11), 1751-1761.

R Core Team (2024). *R: A language and environment for statistical computing* (Version 4.4.2). R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/.

Reid, E. (2015). Embracing, passing, revealing, and the ideal worker image: How people navigate expected and experienced professional identities. *Organization Science*, *26*(4), 997-1017.

Robinson, S. L., O'Reilly, J., & Wang, W. (2013). Invisible at work: An integrated model of workplace ostracism. *Journal of Management*, *39*(1), 203-231.

Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, *48*, 1-36.

RStudio Team (2024). *RStudio: Integrated Development for R.* RStudio, PBC, Boston, MA http://www.rstudio.com/.

Ruggs, E. N., & Hebl, M. R. (2022). Do employees' tattoos leave a mark on customers' reactions to products and organizations? *Journal of Organizational Behavior, 43*(6), 965-982.

Scanlon, M. (2025). *Bottom-up mental illness stigma toward leaders.* [Doctoral dissertation, Queen's University].

Shadish, W.R., Cook, T.D., & Campbell, D.T. (2002). *Experimental and quasi-experimental designs for generalized causal experiments*. Wadsworth Publishing.

Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Holcombe Ehrhart, K., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, *37*(4), 1262-1289.

Skowronski, J. J., & Carlston, D. E. (1987). Social judgment and social memory: The role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, *52*(4), 689-699.

Skowronski, J. J., & Carlston, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin*, *105*(1), 131-142.

Stone-Romero, E. F., & Rosopa, P. J. (2011). Experimental tests of mediation models: Prospects, problems, and some solutions. *Organizational Research Methods*, *14*(4), 631-646.

Chapter 5:

Study 3

The purpose of Study 3 is to replicate and extend the results from Studies 1 and 2. Specifically, I extend the research in three important ways. First, I use a different method to strengthen the findings by avoiding mono-method bias, namely by conducting a field survey with a sample of employees who have a tattooed colleague who they can think of while completing the survey. In this way, Study 3 provides further insight into whether the results of Studies 1 and 2 replicate outside of an experimental context and generalize to a real work setting where pre-existing relationships exist between the tattooed workers and observers. Second, I extend by also exploring the role of industry type as a moderator of the indirect relationship between dark and light tattoo content and negative and positive treatment through stereotypes, namely perceived competence, trustworthiness, artisticness, and riskiness. Third, instead of a categorical variable for tattoo content, I measure perceived darkness and lightness of tattoo content, which can provide more nuance that is reflective of tattoos in real life.

In addition to the measures for perceived darkness and lightness of tattoo content, the field survey includes measures for all the stereotypes from Study 1, namely perceptions of competence, trustworthiness, artisticness and riskiness. Similar to Studies 1 and 2, the survey also includes the email writing task, which again is coded by the same trained RAs to capture externally-rated subtle discrimination and interpersonal fairness outcomes. Further, there are also self-report measures for all outcomes, namely, subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking. Finally, I ask participants if their tattooed colleague is a coworker (i.e., peer), supervisor, manager (i.e., a higher-level position than supervisor, which is equivalent to the supervisor's supervisor condition in Study 1), or

employee/follower, which allows me to again explore the moderating role of hierarchical position in the indirect relationships between tattoo content and observers' treatment of tattooed colleagues through context-free and tattoo-specific stereotypes.

Based on my initial theorizing and the direct and indirect relationships between tattoo content, stereotypes, and treatment from the results of Studies 1 and 2, I hypothesize:

> ***Hypothesis 12***: Perceived darkness of tattoo content will be negatively related to perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and positively related to perceptions of (d) riskiness.
>
> ***Hypothesis 13***: Perceived darkness of tattoo content will be positively related to subtle discrimination, incivility, and ostracism through lower perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and higher perceptions of (d) riskiness.
>
> ***Hypothesis 14***: Perceived lightness of tattoo content will be positively related to perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and negatively related to perceptions of (d) riskiness.
>
> ***Hypothesis 15***: Perceived lightness of tattoo content will be positively related to interpersonal fairness, inclusion, help seeking through higher perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and lower perceptions of (d) riskiness.

The Moderating Role of Hierarchical Position

In Study 1, there were two significant results for hierarchical position moderating the indirect effects of tattoo content on treatment from observers through stereotypes; however, only one significant moderation result was meaningful. First, the significant and meaningful result was that hierarchical position moderated the indirect effect of dark tattoo content on less self-reported subtle discrimination through perceived artisticness, such that this indirect effect was significant when the worker was presented as a coworker or supervisor, but not when the worker was presented as a supervisor's supervisor. Second, hierarchical position moderated the indirect effect of light tattoo content on interpersonal fairness through perceived trustworthiness, such that this indirect effect differed between hierarchical positions, but the indirect effect itself was

not significant for any one of the hierarchical position levels making this result inconclusive. All other results for hierarchical position as a moderator were non-significant.

Because of the mixed findings for hierarchical position as a moderator in Study 1, I include hierarchical position again in Study 3 for one key reason, namely the salience of hierarchical position in real-life compared to an experimental vignette. In a real-life setting, the organizational hierarchy is more prominent with leaders having more power than employees, which can be experienced in employees' day-to-day work activities (e.g., leaders assigning work, making decisions on what needs to be done by whom) making this power differential salient. Based on the real-world context of Study 3 using a field survey, I again include hierarchical position as an exploratory research question.

> ***Research Question 4***: Will hierarchical position moderate the indirect relationships between (a) perceived darkness of tattoo content and negative treatment, and (b) perceived lightness of tattoo content and positive treatment, through stereotypes?

The Moderating Role of Industry Type

As Gary Johns (2006, 2016, 2018) insists, context matters in organizational research (Johns, 2006, 2016, 2018), and perceptions of tattoos in the workplace are no exception. One reason for this may be inferred from expectancy violation (Burgoon, 2015, Burgoon & Hale, 1988) and role congruity (Eagly & Karau, 2002) theories. Specifically, tattoos may be more expected in and congruent with certain industry contexts, namely those that are creative with greater acceptance of self-expression in appearance, such as art and design. In contrast, tattoos may be unexpected and incongruent with other industry contexts, namely those that are more traditional with more formal dress codes and appearance norms, such as finance and insurance. Further, there is empirical evidence supporting the role of context in perceptions of tattooed workers.

On the one hand, tattoos are perceived more positively in four contexts: (1) when they fit the brand image, such as a skate shop or pub (Timming, 2017) or lifestyle boutique hotel (Efthymiou et al., 2023), (2) when the job is more creative, such as graphic design (Ruggs & Hebl, 2022) or entrepreneurial start-ups (Kincaid et al., 2022), (3) when the role is not customer-facing, such as a computer programmer (Cortini et al., 2019), and (4) in professions that do not have a traditionally professional appearance, such as automotive mechanics (Baumann et al., 2016) or tattooing, bartending, trades, and fast food (Wood & Broadbridge, 2023).

On the other hand, tattoos are perceived more negatively in three contexts: (1) when tattoos are incongruent with the brand, such as luxury hotels (Efthymiou et al., 2023), (2) in professions that have a more traditionally formal or professional appearance, such as surgeons (Baumann et al., 2016) and other types of doctors, and lawyers (Wood & Broadbridge, 2023), and (3) when the job is customer-facing job, such as cashiers (Cortini et al., 2019).

In contrast to the findings supporting the role of context, some empirical findings suggest that tattoo content matters more than job context. For example, in hiring childcare professionals and office managers, there were no differences between the two types of jobs in perceptions of tattooed job applicants; however, job applicants with light content tattoos were perceived positively while those with dark content tattoos were perceived negatively, and this was the same for both childcare professional and office manager positions (Burgess & Clark, 2010).

For the current study, I include two broad categories of industry (i.e., traditional versus creative) to explore whether industry type moderates my proposed mediational model. The traditional category includes accounting, finance and insurance, legal services, government and public administration. The creative category includes arts, design, entertainment, recreation,

graphic design, and fashion. Given that this is supplemental to the focus of my conceptual model, I include this as an exploratory research question.

> ***Research Question 5***: Will industry type moderate the indirect relationships between (a) perceived darkness of tattoo content and negative treatment, and (b) perceived lightness of tattoo content and positive treatment, through stereotypes?

Method

Study 3 is a pre-registered[10] field survey with a sample of employed adults from Prolific.com. There were 10 pre-screening questions (see Appendix J), within three categories, to ensure that only those eligible could participate. First, questions confirming pre-set Prolific screeners, namely hours per week worked, work location (in-person, remote, or hybrid), and industry. Second, I asked two distractor questions to reduce demand effects, namely age category and supervisory responsibilities. Third, I asked the one relevant question, namely whether they have a colleague with tattoos, and embedded it within a series of additional distractor question about colleagues, which were presented in a random order, i.e., "Do you have a colleague who…" with four distractor questions (i.e., smokes cigarettes, has a visible physical disability, is overweight, is a refugee). The distractor questions were included to make it less obvious that the purpose of the study was about tattooed colleagues.

To be eligible to participate, individuals had to work 21 or more hours per week, always or sometimes work in-person, and work in one of the following industry types: (a) creative fields, i.e., Arts Design Entertainment and Recreation, Graphic Design, Fashion, or (b) traditional fields, i.e., Finance and Insurance, Government and Public Administration, Legal Services, Accounting, and have a colleague with tattoos on the same work team as them. Those who completed the pre-screening questions were informed that if eligible, they would be able to view

[10] https://osf.io/fstkc/?view_only=de522d2502c34ed1891e2234144975d0

sign-up for the full study on Prolific. As such, when the full study was posted, only those identified as eligible from the pre-screening questions were able to view and sign up to participate.

Those that chose to sign-up were first presented with the letter of information, and if they consented to participate in the study, they proceeded to the survey (see Appendix J). Participants were invited to think about their colleague who has tattoos. First, they were asked whether this colleague was a coworker, supervisor, manager (i.e., a higher position than a supervisor), or an employee/follower. Second, they were asked to complete questions regarding their colleague's tattoos, namely, to describe their colleague's tattoo(s) in an open-ended question, then to complete measures on the extent to which the tattoo is dark and light in content.

Third, they were asked questions on their perceptions of their colleague's competence, trustworthiness, artisticness, and riskiness, which were presented in a random order. Fourth, they were asked to write an email response to the same fictional email task used in Studies 1 and 2 from their colleague, which was later coded by the same trained RAs for externally-rated subtle discrimination and interpersonal fairness. Fifth, measures for subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking were presented to them, in a random order, and they were asked to answer based on their behaviour towards their colleague.

Sixth, demographic questions about themselves and their colleague, and potential control variable questions (e.g., tattoo status, familiarity with tattoos, openness to experience, work experience, closeness with colleague) ended the survey items. Finally, participants were debriefed on the true purpose of the study, because in the letter of information, they were not told that the study was about tattooed colleagues specifically.

Participants

I recruited 279 participants from Prolific.com. All participants were residents of the United States. I removed two participants for entering an email address in the email task as this is a sign of inattention[11], leaving 277 participants as the final sample. Participants' average age was 38.77 years (*SD* = 10.79), and 48.4% (*N* = 134) identified as women, 51.3% (*N* = 142) identified as men, and 0.4% (*N* = 1) did not identify with the gender binary. Participants worked an average of 40.56 hours per week (*SD* = 6.49) with 46.6% (*N* = 181) working in creative fields (i.e., arts, design, entertainment, fashion) and 53.4% (*N* = 148) working in non-creative fields (i.e., finance, insurance, government, accounting, legal services). Among participants, 65.3% (*N* = 181) did not have tattoos themselves and 34.7% (*N* = 96) had one or more tattoos. Most participants reported they were familiar with tattoos (M = 3.64, *SD* = 1.06 on a scale of 1-5). In addition, most participants (*N* = 223, 80.5%) reported that they were thinking of a tattooed coworker, 26 (9.4%) were thinking of a tattooed employee/follower, 14 (5.1%) of a tattooed supervisor, and 14 (5.1%) of a tattooed manager (i.e., a higher position than supervisor – equivalent to supervisor's supervisor in Study 1). The average age of the tattooed colleague was 37.00 years (*SD* = 8.97), with 48.4% (*N* = 134) identifying as women, 50.9% (*N* = 141) identifying as men, and 0.7% (*N* = 2) not identifying with the gender binary.

Measures

Measures for perceived competence, trustworthiness, artisticness, riskiness, subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking were the same as in Studies 1 and 2. See Appendix J for full list of survey items.

[11] There were also attention check items placed throughout the survey, and those answering two or more attention check items incorrectly would be removed from the dataset; however, all participants passed that attention check.

Open-ended Question

Participants were first asked to describe their colleague's tattoo(s) with as much detail as possible (see question below).

> "Please use the text box below to describe your colleague's tattoo(s). In the description, please include information such as the number of tattoos, extent of visible skin covered, how visible the tattoos are, if the tattoos are black and grey or color, what sort of designs, and provide as much detail as you can."

Because of the inconsistency in the responses, no formal analyses were conducted for the responses to this open-ended question.

Tattoo Content

I measured tattoo content with Tews and Stafford's (2020) 14-item measure. Specifically, this measure has seven items for dark tattoo content (i.e., deviant, gothic, intimidating, masculine, rebellious, threatening, and tough) and seven items for light tattoo content (i.e., cheerful, feminine, friendly, happy, innocent, playful, and wholesome). Participants were asked to rate how well each adjective describes their colleague's tattoos on a scale from 1 = *not well at all* to 5 = *extremely well*.

Externally-rated Subtle Discrimination and Interpersonal Fairness

I used the same email writing task (Scanlon, 2025) as used in Studies 1 and 2. Participants were presented with a fictional email from their colleague and asked to write a response. Participant responses were coded for subtle discrimination and interpersonal fairness by the same two trained RAs as Studies 1 and 2. The inter-rater reliability was acceptable, with average measure ICC [2] = .952 for subtle discrimination and average measure ICC [2] = .953 for interpersonal fairness.

Control Variables

Using the same items as Study 1, I again included participants' tattoo status, tattoo familiarity, and openness to experience ($\alpha = .75$) as control variables. In addition, I included items capturing exposure to the tattooed colleague because stereotype activation can occur initially, but the bias may decrease over time with more exposure to those with tattoos (Kunda et al., 2002). Finally, I included questions regarding the extent to which participants like their tattooed colleague, which I add as control variables because liking someone can influence attitudes and behaviours towards that person (Bocian et al., 2018; Fandt et al., 1990). For exposure, I asked participants "How long have you worked with your colleague? (in years)" and "How many hours per week do you work with this colleague?" and "How closely do you work with this colleague?" (1 = *not at all* to 5 = *a great deal*). For liking, participants were asked "How much do you like this colleague?" (1 = *dislike a great deal* to 5 = *like a great* deal) and "Do you interact with this colleague outside of work?" (1 = *never* to 5 = *very often*).

Analytic Procedures

I first computed CFAs in R (Version 4.4.2; R Core Team, 2024) with RStudio (RStudio Team, 2024) again using the lavaan package (Rosseel, 2012) to test the construct validity of the constructs of interest. Because of ratio of the number of items to participants (87/277), I parcelled items to reduce complexity and error and alleviate issues with model convergence and reliability, like other researchers (Little et al., 2013; Williams et al., 2025); doing so makes the measurement model more parsimonious and stable (Little et al., 2013).

For each latent construct, I created two to three parcels, each with two to three items (see Appendix K for a Table showing the number of parcels for each construct and which items were in each parcel). I compared a 14-factor model (i.e., each measured variable separately) to a three-

factor model grouping the predictors (i.e., perceived darkness and lightness of tattoo content), mediators (i.e., perceived competence, trustworthiness, artisticness, riskiness), and outcomes (i.e., externally-rated and self-reported subtle discrimination and interpersonal fairness, and self-reported incivility, ostracism, inclusion, and help seeking), and a one-factor model with all measured variables grouped together that reflected inadequate explication of constructs (i.e., a threat to construct validity; Shadish et al., 2002). I again evaluated CFA model fit based on Howard et al.'s (2025) recommendations, which appear in Table 3.2.

Second, I tested the direct relationships between tattoo content and stereotypes using a multivariate regression, which examines the collective effects of my two continuous independent variables, namely perceived darkness and lightness of tattoo content, on multiple dependent variables, in this case perceptions of competence, trustworthiness, artisticness, and riskiness. I followed the multivariate regression with multiple regression to test the relationships between each tattoo content, namely perceived darkness and lightness, and each stereotype, namely perceptions of competence, trustworthiness, artisticness, and riskiness. I report the parameter estimates from the multiple regression results to indicate the direction of the relationship between each tattoo content predictor and each stereotype dependent variable.

Third, I used the PROCESS macro v.4.1 (Hayes, 2022) in SPSS version 28 to test the hypothesized indirect relationships between perceived darkness (lightness) or tattoo content and negative (positive) treatment from observers through stereotypes, namely perceptions of competence, trustworthiness, artisticness, and riskiness.

Finally, I tested my conditional indirect effects models using the PROCESS macro to explore my research questions regarding the moderating roles of hierarchical position and

industry type. I determined significance based on the index of moderated mediation, with significance indicated by confidence intervals that do not cross zero (Hayes, 2015).

Results

Confirmatory Factor Analysis

The results of the CFA show the 14-factor model provided an adequate fit, χ^2 (588) = 1281.45, $p < .001$, CFI = 0.93, TLI = 0.91, RMSEA = 0.07 [90% CI: 0.06, 0.07], SRMR = 0.08. None of the indices are within the recommended cutoff values (Hu & Benter, 1999). However, based on Howard et al.'s (2025) strength ranges, the SRMR suggests a weak fit, the CFI and TLI suggest a weak to moderate fit, and the RMSEA suggests a moderate fit.

In contrast, the fit was not adequate for the three-factor model χ^2 (663) = 5728.16, $p < .001$, CFI = 0.45, TLI = 0.42, RMSEA = 0.16 [90% CI: 0.16, 0.17], SRMR = 0.18, or the one-factor model, χ^2 (666) = 6635.54, $p < .001$, CFI = 0.35, TLI = 0.32, RMSEA = 0.18 [90% CI: 0.18, 0.18], SRMR = 0.17.

Comparing models with chi-square difference tests, the 14-factor model provided a significantly better fit to the data than the three-factor model ($\Delta \chi^2$ (75) = 4446.7, $p < .001$) or one-factor model ($\Delta \chi^2$ (78) = 5354.1, $p < .001$). Taken together, the goodness of fit indices for the 14-factor model suggested a weak (SRMR) to moderate (CFI, TLI, RMSEA) fit, and this model provided the best fit when compared to the two plausible alternative models.

Hypothesis Testing

Scale reliabilities and descriptive statistics, namely means and standard deviations appear in Table 5.1. Correlations among the study variables are reported in Table 5.2. See Appendix L for Table L1 with means and standard deviations for participant variables, Table L2 for

correlations among participant variables, and Table L3 for correlations between participant variables and study variables.

Table 5.1
Means, Standard Deviations, and Reliabilities for Study 3 Variables

Variables	*M*	*SD*	Reliabilities
1. Perceived tattoo darkness	1.94	.78	.82
2. Perceived tattoo lightness	2.72	.97	.89
3. Coworker	.81	.40	
4. Employee/follower	.09	.80	
5. Supervisor	.51	.22	
6. Manager	.51	.22	
7. Industry	.53	.50	
8. Perceived competence	3.92	.80	.91
9. Perceived trustworthiness	5.92	1.24	.94
10. Perceived artisticness	3.43	.95	.94
11. Perceived riskiness	1.67	.73	.76
12. Subtle discrimination (SR)	1.46	.74	.94
13. Subtle discrimination (ER)	1.46	.81	.95
14. Incivility (SR)	1.26	.49	.88
15. Ostracism (SR)	1.23	.41	.92
16. Interpersonal fairness (SR)	4.67	.44	.88
17. Interpersonal fairness (ER)	4.36	1.24	.95
18. Inclusion (SR)	4.26	.78	.81
19. Help seeking (SR)	6.38	2.54	

Note. $N = 277$. Industry is dummy coded with creative = 0 and traditional = 1. SR = self-report. ER = external-rated.

Table 5.2
Correlations for Study 3 Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Darkness																		
2. Lightness	-.16**																	
3. Coworker	-.02	-.04																
4. Follower	.03	-.01	-.65**															
5. Supervisor	.004	.09	-.47**	-.07														
6. Manager	-.01	-.01	-.47**	-.07	-.05													
7. Industry	-.06	.02	-.04	.03	.02	.02												
8. Competence	.09	.26**	-.07	-.05	.03	.16**	.01											
9. Trust	-.04	.25**	.000	.03	-.04	.001	.01	.64**										
10. Artisticness	.14*	.39**	.001	.002	.02	-.02	-.20**	.61**	.45**									
11. Riskiness	.40**	-.19**	-.06	.05	.12	-.08	-.02	-.30**	-.47**	-.10		.						
12. SD (SR)	.17**	-.14*	-.04	-.01	.11	-.03	.01	-.49**	-.67**	-.36**	.57**							
13. SD (ER)	.14*	-.14*	.01	.04	.02	-.09	.05	-.21**	-.25**	-.16**	.31**	.35**						
14. Incivility	.31**	.03	-.17**	.07	.27**	-.05	.004	-.22**	-.40**	-.12*	.48**	.60**	.21**					
15. Ostracism	.24**	.01	-.09	-.002	.21**	-.05	.003	-.24**	-.39**	-.16**	.45**	.61**	.25**	.71**				
16. IF (SR)	-.15*	.12	.08	-.03	-.13*	.03	.01	.42**	.57**	.35**	-.46**	-.67**	-.21**	-.56**	-.57**			
17. IF (ER)	.01	.18**	-.03	-.02	-.01	.09	-.05	.19**	.14*	.22**	-.16**	-.21**	-.72**	-.06	-.10	.13*		
18. Inclusion	-.18**	-.01	.03	-.01	-.03	-.01	-.004	.28**	.41**	.17**	-.41**	-.54**	-.22**	-.48**	-.65**	.50**	.10	
19. Help seek	-.05	.29**	-.05	-.08	.11	.09	.03	.45**	.40**	.32**	-.27**	-.43**	-.18**	-.27**	-.25**	.30**	.09	.28**

Note. $N = 277$. Variables 1-2 and 8-11 refer to perceptions. Industry is dummy coded such that creative = 0 and traditional = 1. Trust = perceived trustworthiness SD = subtle discrimination. IF = interpersonal fairness. SR = self-reported. ER = externally-rated. Help seek = help seeking.
* $p < .05$, ** $p < .01$

Direct Effects of Perceived Darkness and Lightness of Tattoo Content on Perceptions of Competence, Trustworthiness, Artisticness, and Riskiness

To test Hypotheses 12 and 14 regarding direct relationships between perceived darkness and lightness of tattoo content and stereotypes, i.e., perceptions of competence, trustworthiness, artisticness, and riskiness, I conducted multivariate regression followed by multiple regression for the relationship between perceived darkness and lightness of tattoo content and each stereotype, namely perceived competence, trustworthiness, artisticness, and riskiness. In all analyses, perceived darkness and lightness of tattoo content were entered simultaneously. Below, I report (1) the Wilk's lambda *F* statistic for the combined effects of the tattoo content predictors on the collective set of the dependent variables, (2) the *F* statistic for the effects on each specific dependent variable, and (3) the unstandardized regression coefficients for the direction and significance of each predictor on each dependent variable.

For perceived darkness of tattoo content relating to stereotypes, the Wilks' lambda *F* statistic for the multivariate regression was significant, $\lambda = .78$, $F(4, 271) = 19.00$, $p < .001$, partial $\eta 2 = .22$. The multiple regression follow-up showed perceived darkness of tattoo content was significantly related to perceived riskiness ($F(1, 274) = 46.41$, $p < .001$, partial $\eta 2 = .15$), and this relationship was positive ($b = .35$, $SE = .07$, $p < .001$, 95% CI [.225, .492]), supporting Hypothesis 12d. Perceived darkness of tattoo content was also significantly related to perceived artisticness ($F(1, 274) = 13.66$, $p < .001$, partial $\eta 2 = .05$). However, the relationship between perceived darkness of tattoo content and perceived artisticness was positive ($b = .25$, $SE = .07$, $p < .001$, 95% CI [.104, .395]), which is in the opposite direction compared to what I predicted thus does not support Hypothesis 12c. Further, perceived darkness of tattoo content was significantly related to perceived competence ($F(1, 274) = 5.48$, $p = .020$, partial $\eta 2 = .02$), and

this relationship was positive (b = .14, SE = .06, p = .013, 95% CI [.025, .247]). Again, this is the opposite direction to what I predicted therefore Hypothesis 12a is not supported. Finally, perceived darkness of tattoo content was not significantly related to perceived trustworthiness (F (1, 274) = .000, p = .993, partial η2 = .000; b = .001, SE = .10, p = .995, 95% CI [-.192, .186]). As such, Hypotheses 12b is not supported.

Similarly, the Wilks' lambda F statistic for the multivariate regression was significant for perceived lightness of tattoo content relating to stereotypes, λ = .82, F (4, 271) = 14.95, p < .001, partial η2 = .18. The follow-up multiple regression showed that perceived lightness of tattoo content was significantly related to perceived competence (F (1, 274) = 22.93, p < .001, partial η2 = .08), trustworthiness (F (1, 274) = 18.36, p < .001, partial η2 = .06), artisticness (F (1, 274) = 57.78, p < .001, partial η2 = .17), and riskiness (F (1, 274) = 5.67, p = .018, partial η2 = .02). Specifically, the parameter estimates show that perceived lightness of tattoo content was positively related to perceived competence (b = .23, SE = .05, p < .001, 95% CI [.131, .326]), trustworthiness (b = .32, SE = .09, p < .001, 95% CI [.161, .493]), and artisticness (b = .41, SE = .06, p < .001, 95% CI [.293, .528]), but negatively related to perceived riskiness (b = -.10, SE = .05, p = .033, 95% CI [-.189, -.009]). Thus, these findings support Hypotheses 14a, 14b, 14c, and 14d.

To test the robustness of these findings, I re-ran the analyses with control variables, namely participant tattoo status, tattoo familiarity, openness to experience, years and hours working with their colleague, how closely they work with their colleague, how much they like their colleague, and how much they interact with their colleague outside of work because all of these could affect how they perceive and treat tattooed colleagues. The results largely remained the same, with three exceptions. Specifically, perceived darkness of tattoo content was not

significantly related to perceived competence (F (1,272)= 2.95, p = .087, partial η2 = .01; b = .10, SE = .06, p = .087, 95% CI [-.014, .204]), and perceived lightness of tattoo content was not significantly associated with perceived trustworthiness (F (1, 272)= 2.13, p = .146, partial η2 = .01; b = .09, SE = .06, p = .146, 95% CI [-.032, .218]) or riskiness (F (1, 272)= .47, p = .494, partial η2 = .002; b = -.03, SE = .04, p = .494, 95% CI [-.114, .055]).

Indirect Effects of Perceived Darkness of Tattoo Content on Negative Treatment Through Stereotypes of Perceived Competence, Trustworthiness, Artisticness, and Riskiness

I used Hayes' (2022) PROCESS macro for SPSS to test for indirect relationships between perceived darkness of tattoo content and negative treatment from observers through stereotypes, namely perceived competence, trustworthiness, artisticness, and riskiness (Hypothesis 13). See Table 5.3 for the full list of these mediation results. To summarize these results, there were no significant indirect relationships between perceived darkness of tattoo content and negative treatment outcomes through perceived competence or trustworthiness (i.e., no support for Hypotheses 13a nor 13b). However, both perceived artisticness and riskiness significantly mediated the indirect relationships between perceived darkness of tattoo content and the negative treatment outcomes, i.e., both externally-rated and self-reported subtle discrimination, and self-reported incivility and ostracism.

First, the results show that perceived darkness of tattoo content was indirectly related to less negative treatment, i.e., less externally-rated and self-reported subtle discrimination, incivility, and ostracism, through greater perceived artisticness. These indirect relationships through perceived artisticness are in the opposite direction of what I predicted in Hypothesis 13c, therefore this hypothesis is not supported. Second, perceived darkness of tattoo content was also indirectly associated with more negative treatment, i.e., more externally-rated and self-report

subtle discrimination, incivility, and ostracism, through greater perceived riskiness. This indirect relationship through perceived riskiness is in the same direction as predicted, thus supporting Hypothesis 13d.

To test the robustness of the indirect effects of perceived darkness of tattoo content was on negative treatment, I re-ran the analyses controlling for liking of tattooed colleague. Two additional indirect effects emerged as significant, namely perceived darkness of tattoo content indirectly relating to self-reported subtle discrimination (b = -.03, SE = .01, 95% CI [-.052, -.007]) and incivility (b = -.01, SE = .01, 95% CI [-.023, -.001]) through perceived competence. In addition, three indirect effects through perceived artisticness became non-significant. Specifically, perceived darkness of tattoo content indirectly relating to incivility (b = -.003, SE = .01, 95% CI [-.017, .006]), ostracism (b = -.0002, SE = .004, 95% CI [-.0093, .0079), and external-rated subtle discrimination (b = -.015, SE = .011, 95% CI [-.0392, .0034]).

Indirect Effects of Perceived Lightness of Tattoo Content on Positive Treatment Through Stereotypes of Perceived Competence, Trustworthiness, Artisticness, and Riskiness

Again, using Hayes' (2022) PROCESS macro for SPSS, I tested the indirect relationships between perceived lightness of tattoo content and positive treatment through stereotypes, namely perceptions of competence, trustworthiness, artisticness, and riskiness (Hypothesis 15). See Table 5.4 for the full list of these mediation results. The results partially support Hypotheses 15a-15d, which I summarize below.

Specifically, perceived lightness of tattoo content was significantly indirectly related to more self-reported interpersonal fairness, inclusion, and help seeking through greater perceptions of competence (H15a), trustworthiness (H15b), and artisticness (H15c), and lower perceived riskiness (H15d). The results for the indirect relationship of perceived lightness of tattoo content

and externally-rated interpersonal fairness were mixed. On the one hand, perceived lightness of tattoo content was significantly indirectly related to more externally-rated interpersonal fairness through greater perceived competence (H15a) and greater perceived artisticness (H15c). On the other hand, perceived lightness of tattoo content was not significantly indirectly related to externally-rated interpersonal fairness through either perceived trustworthiness (H15b) or perceived riskiness (H15d).

Again, I re-ran the analyses with liking of tattooed colleague as a covariate to test the robustness of the indirect effects of perceived lightness of tattoo content on positive treatment. Several indirect effects were non-significant controlling for liking of colleague. Specifically, perceived lightness of tattoo content indirectly relating to self-reported interpersonal fairness was no longer significant through perceived trustworthiness (b = .02, SE = .01, 95% CI [-.006, .040]), or perceived riskiness (b = .01, SE = .01, 95% CI [-.004, .035]). Similarly, perceived lightness of tattoo content indirectly relating to inclusion was not significant through perceived trustworthiness (b = .02, SE = .01, 95% CI [-.006, .043]), perceived artisticness (b = .01, SE = .02, 95% CI [-.018, .041]), or perceived riskiness (b = .02, SE = .02, 95% CI [-.006, .056]). Perceived lightness of tattoo content was no longer significantly indirectly related to help seeking through perceived trustworthiness (b = .03, SE = .03, 95% CI [-.014, .088]) or perceived riskiness (b = .02, SE = .02, 95% CI [-.011, .084]). Finally, the indirect relationships between perceived lightness of tattoo content and externally-rated interpersonal fairness through perceived competence (b = .02, SE = .01, 95% CI [-.010, .047]) and perceived artisticness (b = .05, SE = .03, 95% CI [-.005, .105]) were no longer significant.

Table 5.3

Indirect Effects of Perceived Darkness of Tattoo Content on Negative Treatment Outcomes Through Stereotypes (Hypothesis 13)

Predictor	**Mediators**							
	Perceived Competence		Perceived Trustworthiness		Perceived Artisticness		Perceived Riskiness	
	b	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*
Perceived darkness of tattoo content	.094	.062	-.065	.096	.166*	.073	.372***	.052

	Outcomes							
	Subtle Discrimination (self-report)		Subtle Discrimination (external-rated)		Incivility (self-report)		Ostracism (self-report)	
Mediators	*b*	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*
Perceived competence	-.471***	.048	-.222**	.059	-.154***	.034	-.137***	.029
Perceived trustworthiness	-.397***	.026	-.163***	.038	-.153***	.021	-.127***	.018
Perceived artisticness	-.309***	.043	-.157**	.051	-.084**	.029	-.084**	.025
Perceived riskiness	.608***	.055	.332***	.070	.288***	.038	.240***	.034

Indirect Effects: Mediators	Subtle Discrimination (self-report)			Subtle Discrimination (external-rated)			Incivility (self-report)			Ostracism (self-report)		
	b	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
Perceived competence	-.044	.028	-.098, .011	-.021	.015	-.053, .006	-.015	.010	-.036, .004	-.013	.008	-.030, .003
Perceived trustworthiness	.026	.038	-.044, .108	.011	.018	-.015, .057	.010	.015	-.017, .041	.008	.012	-.014, .035
Perceived artisticness	-.051	.023	-.100, -.009	-.026	.014	-.059, -.003	-.014	.008	-.033, -.001	-.014	.008	-.032, -.002
Perceived riskiness	.227	.054	.130, .342	.124	.051	.040, .237	.107	.030	.056, .172	.090	.026	.045, .148

Note. $N = 277$. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.4

Indirect Effects of Perceived Lightness of Tattoo Content on Positive Treatment Outcomes Through Stereotypes (Hypothesis 15)

Predictor	**Mediators**							
	Perceived Competence		Perceived Trustworthiness		Perceived Artisticness		Perceived Riskiness	
	b	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*
Perceived lightness of tattoo content	.212***	.048	.324***	.074	.376***	.054	-.144**	.044

	Outcomes							
	Interpersonal Fairness (self-report)		Interpersonal Fairness (external-rated)		Inclusion (self-report)		Help Seeking (self-report)	
Mediators	*b*	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*
Perceived competence	.230***	.031	.237*	.095	.297***	.058	.212***	.048
Perceived trustworthiness	.205***	.018	.098	.061	.278***	.035	.712***	.115
Perceived artisticness	.167***	.029	.235**	.083	.167**	.053	.669**	.163
Perceived riskiness	-.274***	.033	-.216*	.103	-.457***	.060	-.771**	.201

Indirect Effects: Mediators	Interpersonal Fairness (self-report)			Interpersonal Fairness (external-rated)			Inclusion (self-report)			Help Seeking (self-report)		
	b	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
Perceived competence	.049	.014	.023, .078	.050	.024	.009, .104	.063	.021	.027, .108	.271	.076	.132, .430
Perceived trustworthiness	.066	.018	.033, .106	.032	.025	-.011, 087	.090	.029	.040, .152	.231	.074	.098, .388
Perceived artisticness	.063	.015	.037, .095	.089	.035	.026, .162	.063	.022	.024, .109	.252	.082	.108, .429
Perceived riskiness	.040	.014	.015, .069	.031	.022	-.005, .080	.066	.024	.023, .116	.111	.053	.026, .232

Note. $N = 277$. * $p < .05$, ** $p < .01$, *** $p < .001$.

Conditional (Moderating) Indirect Effects: Hierarchical Position

To answer Research Question 4, I conducted moderated mediation analyses using Hayes' (2022) PROCESS macro for SPSS. Specifically, I assessed whether hierarchical position moderated any of the indirect relationships between perceived darkness (lightness) of tattoo content on negative (positive) treatment through stereotypes of perceived competence, trustworthiness, artisticness, and riskiness. These analyses allowed me to determine whether the indirect relationships differed depending on if the tattooed colleague was a coworker, supervisor, manager (i.e., a higher position than supervisor – equivalent to supervisor's supervisor in Study 1), or employee/follower. I refer to the indices of moderated mediation to determine if any indirect effects differ by level of hierarchical position, and for any significant indices of moderated mediation, I report the results for (a) the index of moderated mediation, and (b) the indirect effects at each individual level of hierarchical position.

Answering Research Question 4a, hierarchical position did not moderate any of the indirect relationships between perceived darkness of tattoo content and negative treatment (namely, externally-rated and self-reported subtle discrimination, incivility, and ostracism) through perceptions of competence, trustworthiness, artisticness, and riskiness. See Table 5.5 for the indices of moderated mediation.

In contrast, answering Research Question 4b, hierarchical position did moderate three of the indirect relationships between perceived lightness of tattoo content and positive treatment through perceptions of riskiness (see Table 5.6 for indices of moderated mediation). First, examining the indices of moderated mediation: with the coworker category as the reference group, the index of moderated mediation was significant and negative for the manager level (b = -.069, SE = .043, 95% CI: [-.149, -.001]), but not significant for the supervisor level (b = -.124,

SE = .122, 95% CI: [-.385, .069]) or the employee/follower level (*b* = .074, *SE* = .057, 95% CI: [-.034, .193]). The significant negative index of moderated mediation suggests that the indirect relationship between perceived lightness of tattoo content and self-reported interpersonal fairness through perceived riskiness was significantly weaker when the tattooed colleague was a manager compared to when the tattooed colleague was a coworker.

Next, based on this significant index of moderated mediation, I looked at the indirect effects at each level of hierarchical position. The results show the indirect relationship between perceived lightness of tattoo content and self-reported interpersonal fairness through perceived riskiness was significant when the tattooed colleague was a coworker (*b* = .042, *SE* = .015, 95% CI: [.016, .074]) or employee/follower (*b* = .116, *SE* = .058, 95% CI: [.007, .237]), but not significant when the tattooed colleague was a supervisor (*b* = -.082, *SE* = .120, 95% CI: [-.340, .118]) or manager (*b* = -.027, *SE* = .040, 95% CI: [-.098, .036]).

Second, hierarchical position moderated the indirect relationship between perceived lightness of tattoo content and inclusion through perceived riskiness. Again, with the coworker category as the reference group, the index of moderated mediation was significant and negative for the manager level (*b* = -.114, *SE* = .068, 95% CI: [-.236, -.002]), but not significant for the supervisor level (*b* = -.206, *SE* = .199, 95% CI: [-.630, .124]) or employee/follower level (*b* = .124, *SE* = .097, 95% CI: [-.048, .333]), which suggests that the indirect relationship between perceived lightness of tattoo content and inclusion through perceived riskiness was significantly weaker when the tattooed colleague was a manager compared to a coworker.

To follow-up this significant index of moderated mediation, I examined the results of the indirect effects for each hierarchical position. These results show that the indirect relationship between perceived lightness of tattoo content and inclusion through perceived riskiness was

significant when the tattooed colleague was a coworker (*b* = .069, *SE* = .024, 95% CI: [.025, .121]) or employee/follower (*b* = .193, *SE* = .099, 95% CI: [.018, .407]), but not significant when the tattooed colleague was a supervisor (*b* = -.136, *SE* = .197, 95% CI: [-.553, .192]) or manager (*b* = -.045, *SE* = .063, 95% CI: [-.152, .060]).

Third, the relationship between perceived lightness of tattoo content and help seeking through perceived riskiness was moderated by hierarchical position. With the coworker category as the reference group, the index of moderated mediation was significant and negative for the manager level (*b* = -.193, *SE* = .132, 95% CI: [-.460, -.005]), but not significant for the supervisor level (*b* = -.347, *SE* = .336, 95% CI: [-1.128, .180]) or employee/follower level (*b* = .209, *SE* = .173, 95% CI: [-.079, .593]). This negative index of moderated mediation again indicates that the indirect relationship between perceived lightness of tattoo content and help seeking through perceived riskiness was significantly weaker when the tattooed colleague was a manager compared to a coworker.

Based on the significant index of moderated mediation, I examined the results for the indirect effects at each hierarchical position. The indirect relationship between perceived lightness of tattoo content and help seeking through perceived riskiness was significant when the tattooed colleague was a coworker (*b* = .117, *SE* = .054, 95% CI: [.029, .239]) or employee/follower (*b* = .326, *SE* = .187, 95% CI: [.025, .748]), but not significant when the tattooed colleague was a supervisor (*b* = -.230, *SE* = .321, 95% CI: [-.974, .296]) or manager (*b* = -.076, *SE* = .113, 95% CI: [-.284, .092]).

Finally, hierarchical position did not moderate the indirect relationship between perceived lightness of tattoo content and externally-rated interpersonal fairness through perceived riskiness. Similarly, hierarchical position did not moderate any of the other indirect relationships between

perceived lightness of tattoo content and positive treatment (i.e., externally-rated and self-reported interpersonal fairness, inclusion, and help seeking) through the other three mediators, namely perceived competence, trustworthiness, and artisticness. See Table 5.6 for all indices of moderated mediation for hierarchical position moderating the indirect relationships between perceived lightness of tattoo content and positive treatment through stereotypes of perceived competence, trustworthiness, artisticness, and riskiness.

Table 5.5

Indices of Moderated Mediation for Hierarchical Position Moderating Indirect Effects of Perceived Darkness of Tattoo Content on Negative Treatment Through Stereotypes of Perceived Competence, Trustworthiness, Artisticness, and Riskiness (RQ 4a)

Predictor	**Mediators**											
		Perceived Competence			Perceived Trustworthiness			Perceived Artisticness			Perceived Riskiness		
		b	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
Supervisor	SD (SR)	.199	.127	-.057, .417	.199	.164	-.070, .539	.018	.107	-.205, .209	.278	.138	-.044, .497
	SD (ER)	.094	.068	-.050, .226	.081	.077	-.035, .259	.009	.053	-.098, .115	.152	.093	-.013, .338
	Incivility (SR)	.065	.044	-.018, .150	.077	.062	-.026, .213	.005	.030	-.055, .061	.132	.068	-.015, .242
	Ostracism (SR)	.058	.037	-.015, .129	.063	.052	-.025, .174	.005	.028	-.051, .060	.110	.057	-.013, .204
Manager	SD (SR)	.097	.140	-.113, .511	-.008	.219	-.440, .468	.013	.138	-.222, .352	-.190	.138	-.044, .497
	SD (ER)	.046	.071	-.050, .226	-.003	.095	-.198, .189	.007	.072	-.113, .182	-.103	.087	-.260, .082
	Incivility (SR)	.032	.052	-.041, .162	-.003	.084	-.168, .178	.004	.039	-.065, .099	-.090	.067	-.196, .073
	Ostracism (SR)	.028	.042	-.032, .150	-.003	.070	-.134, .149	.004	.038	-.062, .091	-.075	.056	-.169, .060
Employee/ Follower	SD (SR)	-.011	.113	-.218, .227	.129	.149	-.146, .438	-.038	.069	-.179, .010	.092	.147	-.163, .421
	SD (ER)	-.005	.056	-.112, .116	.053	.068	-.061, .210	-.019	.038	-.108, .048	.050	.083	-.102, .235
	Incivility (SR)	-.004	.040	-.077, .081	.050	.058	-.053, .175	-.010	.020	-.055, .028	.044	.070	-.080, .199
	Ostracism (SR)	-.003	.034	-.067, .071	.041	.048	-.047, .140	-.010	.019	-.052, .026	.037	.058	-.065, .161

Note. $N = 277$. SD = subtle discrimination. SR = self-report. ER = externally-rated. The reference group for the indices or moderated mediation is the coworker.

Table 5.6

Indices of Moderated Mediation for Hierarchical Position Moderating Indirect Effects of Perceived Lightness of Tattoo Content on Positive Treatment Through Stereotypes of Perceived Competence, Trustworthiness, Artisticness, and Riskiness (RQ 4b)

Predictor		Mediators											
		Perceived Competence			Perceived Trustworthiness			Perceived Artisticness			Perceived Riskiness		
		b	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
Supervisor	IF (SR)	.020	.064	-.113, .132	-.052	.102	-.254, .133	.033	.054	-.085, .130	-.124	.119	-.389, .072
	IF (ER)	.021	.072	-.125, .167	-.025	.062	-.161, .079	.047	.083	-.123, .208	-.097	.121	-.370, .077
	Inclusion (SR)	.012	.039	-.069, .085	-.041	.082	-.202, .112	.023	.040	-.061, .099	-.110	.106	-.348, .062
	Help Seek (SR)	.113	.390	-.599, .723	-.181	.345	-.868, .482	.134	.247	-.384, .546	-.347	.347	-1.141, .138
Manager	IF (SR)	-.003	.050	-.107, .097	.121	.105	-.063, .309	.064	.047	-.019, .148	-.069	.040	-.148, -.004
	IF (ER)	-.003	.055	-.120, .108	.058	.092	-.041, .213	.090	.073	-.027, .246	-.054	.050	-.161, .020
	Inclusion (SR)	-.002	.031	-.063, .059	.094	.078	-.040, .264	.044	.037	-.014, .119	-.061	.036	-.131, -.003
	Help Seek (SR)	-.017	.276	-.587, .502	.422	.336	-.218, 1.073	.255	.209	-.086, .623	-.193	.127	-.462, -.004
Employee/ Follower	IF (SR)	-.003	.051	-.102, .102	.003	.053	-.102, .107	-.044	.038	-.134, .018	.074	.057	-.028, .197
	IF (ER)	-.003	.057	-.124, .110	.001	.032	-.056, .080	-.062	.063	-.225, .022	.059	.059	-.037, .193
	Inclusion (SR)	-.002	.031	-.057, .070	.002	.043	-.040, .264	-.031	.028	-.101, .012	.066	.053	-.023, .187
	Help Seek (SR)	-.002	.284	-.556, .583	.009	.192	-.361, .407	-.177	.159	-.571, .076	.209	.176	-.087, .613

Note. $N = 277$. IF = interpersonal fairness. SR = self-report. ER = externally-rated. The reference group for the indices or moderated mediation is the coworker.

Conditional (Moderating) Effects: Industry Type

I again used Hayes' (2022) PROCESS macro for SPSS to address whether industry type moderated the indirect relationships between perceived darkness (lightness) of tattoo content and negative (positive) treatment from observers through perceptions of competence, trustworthiness, artisticness, and riskiness (Research Question 5). The results for these moderated mediation analyses yielded no significant findings based on the indices of moderated mediation (see Tables 5.7-5.8). Industry type did not moderate any of the indirect relationships between perceived darkness (lightness) of tattoo content on negative (positive) treatment through stereotypes (i.e., perceptions of competence, trustworthiness, artisticness, and riskiness). That is, the indirect relationships did not differ between creative and traditional industry types. See Table 5.7 for the indices of moderated mediation for perceived darkness of tattoo content indirectly relating to negative treatment (i.e., externally-rated and self-reported subtle discrimination, incivility, and ostracism) through perceptions of competence, trustworthiness, artisticness, and riskiness. Refer to Table 5.8 for the indices of moderated mediation for perceived lightness of tattoo content indirectly relating to positive treatment (i.e., externally-rated and self-reported interpersonal fairness, inclusion, and help seeking) through perceived competence, trustworthiness, artisticness, and riskiness.

Summary of Study 3 Results

In Study 3, I tested the direct relationships between perceived darkness and lightness of tattoo content and stereotypes, namely perceived competence, trustworthiness, artisticness, and riskiness (Hypotheses 12 and 14), and the indirect relationships between perceived darkness (lightness) of tattoo content and negative (positive) treatment from observers through stereotypes (Hypotheses 13 and 15). In addition, I explored hierarchical position (Research Question 4) and

industry type (Research Questions 5) as moderators of the indirect relationships between perceived darkness (lightness) of tattoo content and negative (positive) treatment from observers through stereotypes, namely perceptions of competence, trustworthiness, artisticness, and riskiness). A summarized list of the results for each of these Hypotheses and Research Questions appear in Tables 5.9 and 5.10, respectively.

Table 5.7

Indices of Moderated Mediation for Industry Moderating the Indirect Effects of Perceived Darkness of Tattoo Content on Negative Outcomes Through Stereotypes of Perceived Competence, Trustworthiness, Artisticness, and Riskiness (RQ 5a)

	Perceived Competence			Perceived Trustworthiness			Perceived Artisticness			Perceived Riskiness		
Outcomes	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
SD (SR)	.004	.058	-.115, .110	-.056	.082	-.229, .087	-.057	.043	-.145, .027	.112	.081	-.064, .259
SD (ER)	.002	.028	-.063, .054	-.023	.037	-.112, .034	-.029	.024	-.083, .012	.061	.048	-.035, .156
Incivility (SR)	.001	.019	-.036, .041	-.022	.031	-.088, .036	-.016	.013	-.043, .007	.053	.042	-.027, .140
Ostracism (SR)	.001	.017	-.035, .032	-.018	.027	-.078, .026	-.016	.013	-.044, .006	.044	.033	-.025, .106

Note. $N = 277$. SD = subtle discrimination. SR = self-reported. ER = externally-rated.

Table 5.8

Indices of Moderated Mediation for Industry Moderating the Indirect Effects of Perceived Lightness of Tattoo Content on Positive Outcomes Through Stereotypes of Perceived Competence, Trustworthiness, Artisticness, and Riskiness (RQ 5b)

	Perceived Competence			Perceived Trustworthiness			Perceived Artisticness			Perceived Riskiness		
Mediators	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI	*b*	*SE*	95% CI
IF (SR)	-.011	.023	-.056, .033	-.008	.034	-.070, .064	.026	.020	-.012, .066	-.026	.025	-.076, .023
IF (ER)	-.012	.026	-.074, .034	-.004	.021	-.061, .027	.036	.029	-.021, .099	-.020	.027	-.087, .019
Inclusion (SR)	-.015	.030	-.078, .040	-.011	.047	-.109, .078	.026	.021	-.013, .070	-.043	.043	-.138, .034
Help Seeking (SR)	-.063	.124	-.304, .186	-.027	.121	-.278, .193	.102	.084	-.050, .285	-.072	.079	-.255, .058

Note. $N = 277$. IF = interpersonal fairness. SR = self-reported. ER = externally-rated.

Table 5.9
Summary of Hypotheses and Results: Study 3

Hypotheses		Support for Hypothesis?
Hypothesis 12:	Perceived darkness of tattoo content will be negatively related to perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and positively related to perceptions of (d) riskiness.	Partially supported: • 12b is not supported. • 12a and 12c were significant, but in the opposite direction compared to the predicted direction. • 12d is supported.
Hypothesis 13:	Perceived darkness of tattoo content will be positively related to subtle discrimination, incivility, and ostracism through lower perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and higher perceptions of (d) riskiness.	Partially supported: • 13a and 13b are not supported. • 13c was significant but in the opposite direction compared to what was predicted. • 13d are supported.
Hypothesis 14:	Perceived lightness of tattoo content will be positively related to perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and negatively related to perceptions of (d) riskiness.	Supported.
Hypothesis 15:	Perceived lightness of tattoo content will be positively related to interpersonal fairness, inclusion, help seeking through higher perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and lower perceptions of (d) riskiness.	Partially supported: • 15a and 15c are supported. • 15b and 15d are partially supported: supported for all outcomes except externally-rated interpersonal fairness.

Table 5.10
Summary of Research Questions and Results: Study 3

Research Questions		**Findings**
Research Question 4:	Will hierarchical position moderate the indirect relationships between (a) perceived darkness of tattoo content and negative treatment, and (b) perceived lightness of tattoo content and positive treatment, through stereotypes?	• No significant results for 5a. • 5b significant: Hierarchical position significantly moderated the indirect relationships between perceived lightness of tattoo content and self-reported interpersonal fairness, inclusion, and help seeking through perceived riskiness, such that these relationships were significant when the tattooed colleague was a coworker or employee/follower, but not when the tattooed colleague was a supervisor or manager. • 5b non-significant: no moderation of the indirect relationship between perceived lightness of tattoo content and externally-rated interpersonal fairness through perceived riskiness. And no moderation of the indirect relationships between perceived lightness of tattoo content and positive treatment through the other mediators, namely perceived competence, trustworthiness, and artisticness.
Research Question 5:	Will industry type moderate the indirect relationships between (a) perceived darkness of tattoo content and negative treatment, and (b) perceived lightness of tattoo content and positive treatment, through stereotypes?	No significant industry type moderation

Discussion

The goal of Study 3 was to further test whether my conceptual model extends beyond the experimental context to a sample of employees who have a colleague with tattoos. The findings from Study 3 provide some support for my conceptual model. First, the significant indirect effects found in Study 1 for dark tattoo content on negative treatment through perceptions of riskiness and artisticness were replicated. Specifically, perceived darkness of tattoo content was indirectly associated with greater negative treatment (i.e., less externally-rated and self-reported subtle discrimination, incivility, and ostracism) through perceptions of riskiness, and less negative treatment (i.e., more externally-rated and self-reported subtle discrimination, incivility, and ostracism) through perceptions of artisticness. However, the indirect relationships between perceived darkness of tattoo content and externally-rated subtle discrimination, incivility, and ostracism through perceived artisticness were no longer significant when controlling for how much participants like their tattooed colleague. Thus, taken together with the findings from Study 2 which used a randomized experimental design and supported the effects of perceived riskiness on negative treatment (namely, self-reported subtle discrimination, incivility, and ostracism), substantial support is provided for the indirect effects of dark tattoo content on negative treatment through perceived riskiness.

Second, the findings of Study 3 also revealed significant indirect relationships between perceived lightness of tattoo content and positive treatment (i.e., externally-rated and self-reported interpersonal fairness, inclusion, and help seeking) through stereotypes of perceived competence, trustworthiness, artisticness, and riskiness. Specifically, perceived lightness of tattoo content was significantly indirectly related to more self-reported interpersonal fairness, inclusion, and help seeking through greater perceptions of competence, trustworthiness,

artisticness, and lower perceptions of riskiness. The results for externally-rated interpersonal fairness as an outcome were mixed: Perceived lightness of tattoo content was significantly indirectly related to more externally-rated interpersonal fairness through greater perceptions of competence and artisticness, but not through perceptions of trustworthiness or riskiness. However, perceptions of competence and artisticness were not significant mediators of the indirect relationship between perceived lightness of tattoo content and externally-rated interpersonal fairness when controlling for how much participants like their tattooed colleague.

In addition, when controlling for participants' liking of their tattooed colleagues, the indirect relationships between perceived lightness of tattoo content and self-reported interpersonal fairness, inclusion, and help seeking through perceptions of trustworthiness and riskiness were not significant. Finally, the indirect relationship between perceived lightness of tattoo content and inclusion through perceived artisticness became non-significant when controlling for participants' liking of their tattooed colleagues. Given that the indirect relationships between light tattoo content and positive treatment from colleagues through stereotypes, namely perceived competence, trustworthiness, artisticness, and riskiness, only emerged in the field survey, but not in the experimental study, and many of these relationships were non-significant when controlling for liking of the tattooed colleague, support for this indirect effect should be interpreted cautiously.

In addition, I posed two research questions both of which focus on the importance of context, namely hierarchical position of the tattooed colleague and industry type. First, hierarchical position moderated several of the indirect relationships between perceived lightness of tattoo content and positive treatment. Specifically, hierarchical position moderated the indirect relationships between perceived lightness of tattoo content and self-reported interpersonal

fairness, inclusion, and help seeking through lower perceived riskiness, namely these indirect effects were only significant when the tattooed colleague was a coworker or employee/follower, but not when the tattooed colleague was a supervisor or manager.

The significant moderated mediation results suggest that colleagues perceive their tattooed peers (i.e., coworkers) or tattooed employees/followers with light tattoo content as less risky, and in turn, treat them with more interpersonal fairness, include them in the work group more, and seek help from them more, while the same is not true for tattooed supervisors or tattooed managers with light tattoo content. As such, these results suggest that the positive expectancy violation of light tattoo content does not emerge for all hierarchical positions. Specifically, tattooed colleagues of equivalent or lower hierarchical levels within the organizational, relative to the observer, appear to benefit from light tattoo content; however, this benefit does not emerge for tattooed colleagues of higher levels in the organizational hierarchy, relative to the observer. For leaders, tattoos are more of an expectancy violation based on the prototypical leader (van Knippenberg et al., 2004), which is associated with having a more professional and formal appearance (e.g., Bailey et al., 2022; Maran et al., 2021), which could limit the extent to which tattoos relate to positive outcomes.

Further, hierarchical position did not moderate the indirect relationships between perceived lightness of tattoo content and externally-rated or self-reported interpersonal fairness, inclusion, or help seeking through perceptions of competence, trustworthiness, or artisticness, nor the indirect relationship between perceived lightness of tattoo content and externally-rated interpersonal fairness through perceived riskiness. These results for hierarchical position provide no support the idea that leaders would experience greater stigma due to tattoos violating expectations of the prototypical leader appearance which is more professional and formal (Maran

et al., 2021; van Knippenberg et al., 2004). Instead, the non-significant findings suggest that the indirect relationships between tattoo content and treatment from colleagues through stereotypes do not differ as a function of the hierarchical position of the tattooed colleague. As such, it could be that even if tattoos violate the prototypical leader appearance, leaders do not experience greater stigma because their higher level of status and power serves a protective function, as proposed in stigma (Link & Phelan, 2001) and expectancy violations (Burgoon, 2015; Burgoon & Hale, 1988) theories.

Second, industry type did not significantly moderate any of the indirect relationships in my conceptual model. Specifically, the indirect relationships between perceived darkness (lightness) of tattoo content and negative (positive) treatment from observers through stereotypes, namely perceptions of competence, trustworthiness, artisticness, and riskiness, did not differ for creative versus traditional industry types. The lack of significant moderation results for industry type is contrary to what might be expected considering tattoos are more congruent with creative industries while incongruent with more traditional industries. In addition, this finding is in contrast to results of prior studies that found job context to play an important role in how tattooed individuals are perceived. The difference between my Study 3 results and prior empirical findings in the literature could be due to differences in the topic of focus, namely on-the-job among colleagues versus in hiring settings or customer perceptions of tattooed workers. Study 3 was conducted with employees reporting on their tattooed colleagues, as such the industry in which they work is part of their day-to-day experience therefore is less salient. In contrast, prior empirical studies that found industry context to be important were examining either likelihood of hiring tattooed job candidates (e.g., Cortini et al., 2019) or customer perceptions of tattooed service workers (e.g., Baumann et al., 2016). In each of these cases,

industry may be more salient as both managers making hiring decisions and customers interacting with service workers consider how tattoos fit the organization or brand image (e.g., Timming, 2017).

Strengths and Limitations

There are several strengths of Study 3. First, the results from Study 3 replicate and extend findings from Studies 1 and 2. As such, this mitigates mono-method bias and enhances the validity, namely construct and external validity, of the results because the findings replicate across two methodologies (Shadish et al., 2002). Second, the externally-rated outcomes of subtle discrimination and interpersonal fairness, from the email writing task coded by trained RAs, are significant in most cases, which further reduces issues of mono-method bias associated with using all self-report measures (Shadish et al., 2002) because this outcome is (a) a behavioural performance measure, and (b) externally-rated. Third, the sample is representative of the United States population in terms of percentage of people with tattoos: 34.7% of participants in Study 3 reported having one or more tattoos, while approximately 33% of adults in the United States have tattoos (Schaeffer & Dinesh, 2023).

There are three limitations of Study 3. First, the data are cross-sectional in nature, which by itself precludes causal inferences about mediation. However, combined with the results of the two randomized experiments in Studies 1 and 2, support for causal indirect effects of tattoo content on treatment from observers through stereotypes cannot be excluded. Specifically, the indirect effects of dark tattoo content on negative treatment through tattoo-specific stereotypes. Second, the industry categories were limited to two broad industry types, namely traditional type industries and creative type industries. These limited industry type categories could be a threat to construct validity, namely inadequate explication of constructs (Shadish et al., 2002). The two

categories could be too general, which would also threaten statistical conclusion validity with more variance within each group than between the groups (Shadish et al., 2002). As a result, it would be premature to dismiss the role of industry type.

Third, the results for hierarchical position moderating the indirect relationships between perceived lightness of tattoo content and positive treatment through perceived riskiness were significant for only the self-report outcomes, namely self-reported interpersonal fairness, inclusion, and help seeking, but not significant for the externally-rated interpersonal fairness. Finding significant results for only self-report measures could raise concerns of threats to construct validity, namely mono-method bias (Shadish et al., 2002). However, the CFA results showed that a model with all outcomes separate provided the best fit to the data, which mitigates concerns of mono-method bias.

References

Bailey, E. R., Horton, C. B., & Galinsky, A. D. (2022). Enclothed harmony or enclothed dissonance? The effect of attire on the authenticity, power, and engagement of remote workers. *Academy of Management Discoveries*, *8*(3), 341-356.

Baumann, C., Timming, A. R., & Gollan, P. J. (2016). Taboo tattoos? A study of the gendered effects of body art on consumers' attitudes toward visibly tattooed front line staff. *Journal of Retailing and Consumer Services, 29*, 31-39.

Bocian, K., Baryla, W., Kulesza, W. M., Schnall, S., & Wojciszke, B. (2018). The mere liking effect: Attitudinal influences on attributions of moral character. *Journal of Experimental Social Psychology*, *79*, 9-20.

Burgess, M., & Clark, L. (2010). Do the “savage origins” of tattoos cast a prejudicial shadow on contemporary tattooed individuals? *Journal of Applied Social Psychology*, *40*(3), 746-764.

Burgoon, J. K. (2015). Expectancy violations theory. In Berger, C.R., Roloff, M.E., Wilson, Dillard, J.P., Caughlin, J., & Solomon, D. (Eds.), *The international encyclopedia of interpersonal communication*. Wiley.

Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communications Monographs, 55*(1), 58-79.

Cortini, M., Bortune, R., & Fantinelli, S. (2019). Personnel selection and body art. A mix-method study on tattooed job candidates. *International Journal of Scientific and Technological Research, 8*(9), 1966-1970.

Efthymiou, L., Orphanidou, Y., & Karayiannis, A. (2023). The impact of workers' tattoos and piercings on employment: Suggestions for pragmatic career planning. In A. Broadbridge

(Ed.). *The Emerald Handbook of Appearance in the Workplace* (pp. 301-316). Emerald Publishing Limited.

Fandt, P. M., Labig, C. E., & Urich, A. L. (1990). Evidence and the liking bias: Effects on managers' disciplinary actions. *Employee Responsibilities and Rights Journal*, *3*, 253-265.

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Publications.

Howard, M. C., Boudreaux, M., Cogswell, J., Manix, K. G., & Oglesby, M. T. (2025). A literature review of model fit and model comparisons with confirmatory factor analysis: Formalizing the informal in organizational science. *Applied Psychology: An International Review*, *74*(1), e12592.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1-55.

Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, *31*(2), 386-408.

Johns, G. (2017). Reflections on the 2016 decade award: Incorporating context in organizational research. *Academy of Management Review*, *42*(4), 577-595.

Johns, G. (2018). Advances in the treatment of context in organizational research. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*(1), 21-46.

Kincaid, P. A., Short, J. C., & Wolfe, M. T. (2022). Got ink, get paid? Exploring the impact of tattoo visibility on crowdfunding performance. *Journal of Business Venturing Insights, 17*, e00317.

Kunda, Z., Davies, P. G., Adams, B. D., & Spencer, S. J. (2002). The dynamic time course of stereotype activation: Activation, dissipation, and resurrection. *Journal of Personality and Social Psychology*, *82*(3), 283-299.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*(1), 363-385.

Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological Methods*, *18*(3), 285-300.

Maran, T., Liegl, S., Moder, S., Kraus, S., & Furtner, M. (2021). Clothes make the leader! How leaders can use attire to impact followers' perceptions of charisma and approval. *Journal of Business Research*, *124*, 86-99.

R Core Team (2024). *R: A language and environment for statistical computing* (Version 4.4.2). R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/.

Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, *48*, 1-36.

RStudio Team (2024). *RStudio: Integrated Development for R.* RStudio, PBC, Boston, MA http://www.rstudio.com/.

Ruggs, E. N., & Hebl, M. R. (2022). Do employees' tattoos leave a mark on customers' reactions to products and organizations? *Journal of Organizational Behavior, 43*(6), 965-982.

Scanlon, M. (2025). *Bottom-up mental illness stigma toward leaders.* [Doctoral dissertation, Queen's University].

Schaeffer, K., & Dinesh, S. (2023, August 15). *32% of Americans have a tattoo, including 22% who have more than one*. Pew Research Center. https://www.pewresearch.org/short-reads/2023/08/15/32-of-americans-have-a-tattoo-including-22-who-have-more-than-

one/#:~:text=Gender%3A%2038%25%20of%20women%20have,and%2014%25%20of%20Asian%20Americans

Shadish, W.R., Cook, T.D., & Campbell, D.T. (2002). *Experimental and quasi-experimental designs for generalized causal experiments*. Wadsworth Publishing.

Timming, A. R. (2017). Body art as branded labour: At the intersection of employee selection and relationship marketing. *Human Relations*, *70*(9), 1041-1063.

van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly*, *15*(6), 825-856.

Williams, L. J., Hanna, A. A., & Smith, T. A. (2025). Methods and theory for using parcels in management research: An overview and guide for improved analysis. *Journal of Management*. Advance online publication.

Wood, B., & Broadbridge, A. (2023). A Tattooed Workforce–Still a Liability? In A. Broadbridge (Ed.). *The Emerald Handbook of Appearance in the Workplace* (pp. 317-330). Emerald Publishing Limited.

Chapter 6:

General Discussion

I started this research with an interest in understanding how tattooed workers are perceived by colleagues on-the-job, and whether tattooed leaders are perceived differently than tattooed peers (i.e., coworkers). I was intrigued because most of the research in this area focuses on hiring managers' perceptions of tattooed job applicants, or customer perceptions of tattooed workers. Further, much of the available research is rudimentary–lacking either theoretical or methodological rigor. As such, I was interested in the possibility of conducting more nuanced and rigorous research in two key ways. First, I provide rigor conceptually by drawing from stigma (Link & Phelan, 2001) and expectancy violations (Burgoon, 2015, Burgoon & Hale, 1988) theories to develop a conceptual framework that includes both negative and positive effects of tattoos in the workplace. Second, I provide methodological rigor by testing my predictions across three studies, namely two experiments which allow for causal inferences regarding my conceptual indirect effects model and enhance internal validity, and a field survey for replication, which enhances construct validity by mitigating concerns of mono-method bias (Shadish et al., 2002). In addition, I have lived experience as a heavily tattooed person, and wanted to take the opportunity to contribute to knowledge on how tattooed individuals are perceived and treated in the workplace.

Of the research that has been conducted, findings show that tattooed individuals are typically stigmatized in the workplace with observers assigning negative stereotypes to them. This stigmatization can be seen with tattooed job applicants being less likely to be hired (Brallier et al., 2011; Henle et al., 2022; Tetteh et al., 2022; Tews & Stafford, 2020a), and customers having less confidence in tattooed workers' abilities (Dean, 2011) and perceiving tattooed

workers' appearance as less appropriate or professional (Dean, 2011; Verissimo et al., 2016; Zidenberg et al., 2022). However, there are conditions under which tattoos are not perceived negatively. For example, when the tattoo content is friendly and cheerful, job applicants with tattoos are perceived similarly to job applicants without tattoos (e.g., Henle et al., 2022). In addition, tattoos are seen as an asset in certain job contexts, such as in creative jobs (e.g., graphic designers, Ruggs & Hebl, 2022; entrepreneurs, Kincaid et al., 2022) or when tattoos fit the brand image (e.g., a pub or skate shop, Timming, 2017; boutique lifestyle hotels, Efthymiou et al., 2023). Thus, the goal of my three studies was to focus on this important organizational and social issue, and deepen our understanding of the effects of tattoo content in the workplace, and the nuances in observer perceptions and (mis)treatment of tattooed colleagues.

Based on stigma (Link & Phelan, 2001) and expectancy violations (Burgoon, 2015, Burgoon & Hale, 1988) theories, I proposed that dark content tattoos would be seen as a negative expectancy violation while light content tattoos would be seen as a positive expectancy violation. As such, I predicted that dark content tattoos result in observers perceiving these tattooed colleagues more negatively, namely, as less competent, less trustworthy, less artistic, and more risky, which subsequently would result in observers engaging in negative behaviours, such as subtle discrimination (Studies 1-3), incivility and ostracism (Studies 2 and 3), towards colleagues with dark content tattoos. In contrast, I predicted that tattooed colleagues with light content tattoos would be perceived more positively by others in the workplace, namely, as more competent, more trustworthy, more artistic, and less risky, which, results in observers behaving more positively with more interpersonal fairness (Studies 1-3), inclusion and help seeking (Studies 2 and 3) towards colleagues with light content tattoos. In addition, I included exploratory research questions on the moderating roles of gender (Studies 1 and 2), and two

contextual factors, (a) hierarchical position (Studies 1 and 3), and (b) industry type (Study 3). The results of my three studies are summarized in tables in Appendices M1-M2.

Lessons from Study 1

For Study 1, I conducted a randomized experimental study, manipulating tattoo content as the predictor, and hierarchical position and gender as moderators, while measuring stereotypes namely perceived competence, trustworthiness, artisticness, and riskiness as mediators, and treatment from observers namely subtle discrimination and interpersonal fairness as the outcomes. Notably, I examined perceptions of two types of stereotypes: (a) context-free stereotypes, i.e., perceived competence and trustworthiness, and (b) tattoo- or context-specific stereotypes, i.e., perceived artisticness and riskiness, which provides a nuanced understanding of how observers perceive tattooed colleagues. I tested both the direct effects of tattoo content on stereotypes and treatment, and the indirect effects of tattoo content on treatment through stereotypes. The experimental design allows me to make causal inferences about the direct effects of dark and light tattoo content on stereotypes (i.e., the mediators), namely perceptions of competence, trustworthiness, artisticness, and riskiness.

The results from Study 1 suggest that dark tattoo content is more salient than light tattoo content and can elicit both negative and positive observer perceptions. Both light and dark tattoo content had direct effects on tattoo-specific stereotypes: Workers with light or dark tattoo content were perceived as more artistic than those with no tattoos, and workers with dark tattoo content were perceived as more risky than those with light or no tattoos. However, contrary to much of the stigma literature (e.g., Fiske, 2018; Henderson et al., 2022) there were no direct effects of tattoo content on context-free stereotypes (i.e., perceived competence and trustworthiness). In addition, there were significant indirect effects for workers with dark tattoo content. Specifically,

dark tattoo content positively and indirectly affected subtle discrimination through perceptions of riskiness, but negatively and indirectly affected subtle discrimination through perceptions of artisticness. Finally, there were no indirect effects for workers with light tattoo content on self-reported or externally-rated interpersonal fairness through any of the stereotypes, namely perceived competence, trustworthiness, artisticness, or riskiness.

The significant indirect effects for dark tattoo content but not light tattoo content could be explained through ideas of negativity bias (Skowronski & Carlston, 1987, 1989) and the idea that bad is stronger than good (Baumeister et al., 2001), both of which posit that negative attributes or events violate our expectations, therefore stand out more, and more quickly form and maintain negative perceptions. However, the positive finding of workers with dark content tattoos being perceived as more artistic, which, in turn, related to less subtle discrimination, does question the usefulness of explanations based on negativity bias and bad being stronger than good. A different explanation can be drawn from considering tattoos as a non-verbal communication cue: these findings for dark tattoo content are an example of polysemy, where one cue has multiple meanings (Burgoon et al., 2022). The finding that dark tattoo content can result in both negative and positive perceptions indicates that both tattooed and non-tattooed observers of tattooed others should be the target of initiatives to overcome tattoo-based discrimination.

Taken together, the experimental design used and the results that emerged in Study 1 allow me to make causal inferences about the direct effects of tattoo content on tattoo-specific stereotypes (i.e., predictors affecting mediators); however, I cannot make causal inferences about the effects of tattoo-specific stereotypes on treatment toward tattooed colleagues (i.e., mediators affecting outcomes). This inability to make causal inferences about the full indirect effects model, i.e., the effects of both the predictors on mediators and the mediators on outcomes, is a

methodological limitation of experimental mediational research. As such, researchers are strongly recommended to take a multi-study approach to address this issue by manipulating (a) predictors to test the effects on mediators as I did in Study 1, and then (b) mediators to test the effects on outcomes (Pirlott & MacKinnon, 2016; Stone-Romero & Rosopa, 2011). Based on these recommendations and my proposed conceptual mediational model (Figure 1.1), I conducted another randomized experimental study for Study 2 to extend my focus on the mediational role of tattoo-specific stereotypes and enhance my ability to make causal inferences. Specifically, I manipulated the tattoo-specific stereotypes, i.e., perceived riskiness and artisticness, and measured treatment toward colleagues in two ways: (a) externally-rated behaviours from an email writing task, and (b) observers' self-reported behaviours. This multi-study experimental design enhances my ability to make causal inferences for the full indirect effects in my conceptual model (Figure 1.1).

Lessons from Study 2

The results of Study 2 supported the direct effects of perceived riskiness on negative treatment from observers, namely greater self-reported subtle discrimination, incivility, and ostracism, and less self-reported interpersonal fairness, inclusion, and help seeking. However, no significant effects emerged on externally-rated subtle discrimination or interpersonal fairness. In contrast, there was no support for any effects of perceived artisticness on the externally-rated or self-reported treatment by observers. In this case, the idea of bad is stronger than good (Baumeister et al., 2001) and negativity bias (Skowronski & Carlston, 1987, 1989) can help explain the significant findings for perceived riskiness but not artisticness. Negativity bias suggests that negative cues, especially when morality-related, such as perceived riskiness, have more of an impact on observer reactions than are positive cues, such as perceived artisticness.

Similarly, with the idea that bad is stronger than good, negative stereotypes have stronger effects than positive stereotypes (Baumeister et al., 2001), and are more influential in impression formation (Baumeister et al., 2001; Skowronski & Carlston, 1987, 1989), which is especially relevant in the experimental vignette context because observers are essentially forming initial impressions of the fictional worker depicted in the vignette.

Taken together, as randomized experimental studies, Studies 1 and 2 enhance the causal inferences that can be made about my conceptual mediational model; however, it remains to be seen whether my conceptual model extends to field settings. Accordingly, Study 3 addressed concerns of mono-method bias (Shadish et al., 2002) by exploring the indirect effects from my conceptual model using a field survey of employees reporting on actual tattooed colleagues, and their perceptions of and behaviours towards these colleagues.

Lessons from Study 3

There are two key findings from Study 3 regarding the indirect relationships between dark (light) tattoo content and negative (positive) treatment of tattooed colleagues through stereotypes of perceived competence, trustworthiness, artisticness, and riskiness. First, the results for dark tattoo content from Study 1 were replicated in Study 3: Perceived darkness of tattoo content was significantly indirectly related to (a) greater negative treatment from observers, namely more externally-rated and self-report subtle discrimination, incivility, and ostracism through perceived riskiness, and (b) less negative treatment, namely less externally-rated and self-report subtle discrimination, incivility, and ostracism through perceived artisticness. Although the indirect relationships between perceived darkness of tattoo content and externally-rated subtle discrimination, incivility, and ostracism through perceived artisticness were not significant when controlling for liking of the tattooed colleague. As such, the main consistent

finding is the indirect effect of dark tattoo content on negative treatment of tattooed colleagues through perceived riskiness.

Second, perceived lightness of tattoo content was significantly indirectly related to more positive treatment, namely, more externally-rated and self-reported interpersonal fairness, inclusion, and help seeking, through stereotypes (namely, perceived competence, trustworthiness, artisticness, and riskiness). All possible indirect relationships between perceived lightness of tattoo content and positive treatment through the stereotypes were significant with the exception of two stereotypes were not significant as mediators in the indirect relationship between perceived lightness of tattoo content and externally-rated interpersonal fairness: (a) perceived trustworthiness, and (b) perceived riskiness. Further, perceived competence and artisticness also did not mediate the indirect relationship between perceived lightness of tattoo content and externally-rated interpersonal fairness when controlling for liking of the tattooed colleague. In addition, with liking of the tattooed colleague as a covariate, perceived trustworthiness and riskiness were not significant mediators of any of the relationships between perceived lightness of tattoo content and self-reported interpersonal fairness, inclusion, and help seeking,

The significant findings for indirect relationships between perceived lightness of tattoo content and treatment of tattooed colleagues through stereotypes, namely perceptions of competence, trustworthiness, artisticness, and riskiness, are unique to Study 3 because there were no significant indirect effects for light tattoo content in Study 1. This inconsistency in findings for light tattoo content between Studies 1 and 3 could be a function of the difference in methods, namely an experiment versus a field survey. In the experiment in Study 1, despite the light content tattoos being perceived as realistic (compared to actual tattoos as shown Pilot Study 2), the participants were still in an experimental setting in which they obviously knew they were

answering questions about a fictional worker. The field survey of Study 3 provided a more realistic setting by having participants answer questions about an actual tattooed colleague. The pre-existing relationships between participants and tattooed colleagues do play a role, which can be seen with several of the relationships being non-significant when adding liking of the tattooed colleague as a covariate in the analyses. Given that the significant results emerged in the field survey but not the experiment, and many were eliminated when controlling for liking of the tattooed colleague, any causal inferences about the indirect effects of light tattoo content on positive treatment of tattooed colleagues through stereotypes, namely perceptions of competence, trustworthiness, artisticness, and riskiness, would be premature.

Exploration of Moderators Across Studies 1-3

In addition to tests of the unconditional indirect effects models across Studies 1-3, I also explored three moderators of the indirect relationships between dark (light) tattoo content and negative (positive) treatment through context-free and tattoo-specific stereotypes, namely (1) gender in Studies 1 and 2, (2) hierarchical position in Studies 1 and 3, and (3) industry type in Study 3. First, in Studies 1 and 2, I explored gender as a moderator, and gender moderated only one effect: the indirect effect of dark tattoo content on self-reported subtle discrimination through perceived competence. This significant moderation indicates that the two genders differ from each other; however, probing the indirect effect for each gender separately showed that neither women nor men showed a significant indirect effect. Further, gender did not moderate any of the other indirect effects in Study 1, nor any of the direct effects of tattoo-specific stereotypes on treatment from observers in Study 2. One possible reason for these null findings regarding the moderating effects of gender is that tattoo content (Study 1) and tattoo-specific stereotypes (Study 2) were more salient cues than gender. Given gender may be less salient as a cue in a

context in which employees worked with each other on the same work team, and in-person all or some of the time (preconditions for participation in Study 3), I did not explore the role of gender in Study 3.

Second, in Studies 1 and 3, I explored hierarchical position as a possible boundary condition. In Study 1, I manipulated hierarchical position by presenting the fictional worker as either a coworker, supervisor, or supervisor's supervisor, and as indicated by indices of moderated mediation, two significant effects emerged. (a) The indirect effect of light tattoo content on self-reported interpersonal fairness through perceived trustworthiness was moderated by hierarchical position; however, similar to the gender moderation discussed above, none of the hierarchical positions had significant indirect effects on their own, although they did significantly differ from each other. (b) The indirect effect of dark tattoo content on self-reported subtle discrimination through greater perceived artisticness was significant when the worker was presented as a coworker or supervisor, but not when the worker was presented as a supervisor's supervisor. This finding indicates that the benefits of less discrimination towards colleagues with dark content tattoos through perceptions that are more artistic is only enjoyed by coworkers or supervisors, but not for a higher-level position relative to the observer, such as supervisor's supervisor.

In Study 3, hierarchical position significantly moderated the indirect relationship between perceived lightness of tattoo content and positive treatment (namely self-reported interpersonal fairness, inclusion, and help seeking) through perceived riskiness. Specifically, perceived lightness of tattoo content was significantly indirectly related to positive treatment, namely self-reported interpersonal fairness, inclusion, and help seeking, through lower perceptions of riskiness when the tattooed colleague was a coworker or employee/follower; however, these

indirect relationships were not significant when the tattooed colleague was a supervisor or manager (i.e., a position higher than supervisor, relative to the observer).

Taken together, there were more significant moderation results for hierarchical position in Study 3 than in Study 1. I suggest this discrepancy emerges because hierarchical position was more salient in Study 3 with employees reporting on actual tattooed colleagues rather than fictional colleagues as in Study 1. Hierarchical position, and any associated power differentials, would be more salient in a real-world setting. For example, the supervisors and managers reported on in Study 3 actually had more power than the employees completing the survey, whereas hierarchical position in Study 1 was simply a label in which the salience of the cue may be limited because of the lack actual power differential between the worker described in the vignette and the participant. This power differential is important because Link and Phelan (2001) suggest that in order to stigmatize, the stigmatizer must have more power relative to the stigmatized.

Despite somewhat mixed findings in results for hierarchical position as a moderator, there is one key similarity across Studies 1 and 3. In both Studies, tattooed colleagues were treated less negatively (Study 1) and more positively (Study 3) through more positive perceptions, namely greater perceptions of artisticness (Study 1) and lesser perceptions of riskiness (Study 3), when the tattooed colleague was of an equivalent or lower level in the organizational hierarchy relative to the observer. Specifically, these benefits emerged when the tattooed colleague was a peer (i.e., coworker) in Studies 1 and 3, or an employee/follower in Study 3. Although similar findings emerged for tattooed supervisors in Study 1, they did not emerge for the higher-level position of supervisor's supervisor in Study 1, nor for supervisors or managers (the equivalent to supervisor's supervisor) in Study 3. These findings suggest that explanations based on positive

expectancy violations may only apply to lower levels of the organizational hierarchy. Because the results for the higher-level positions were non-significant, it would be premature to draw any conclusions about why or what this means for tattooed leaders (i.e., supervisors or managers).

Third, in Study 3, I explored the role of industry type as a moderator of my proposed indirect effects model (see Figure 1.1). Industry type did not significantly moderate any of the indirect relationships between perceived darkness (lightness) of tattoo content and negative (positive) treatment of tattooed colleagues through context-free and tattoo-specific stereotypes. This finding contrasts with prior theoretical ideas about (in)congruence, prior empirical findings, and anecdotal evidence, namely that tattoos would be more accepted in arts-related or creative fields and less accepted in more traditional fields. Several factors might explain this discrepancy. (a) The salience of the industry and pre-existing relationships within the industry may be important considerations. Industry type may be less salient within the context of existing working relationships. Given that Study 3 was conducted in the context of actual pre-existing relationships, the industry in which participants are employed may be a less salient cue because it is a regular part of their day-to-day experiences. In contrast, industry type may be more salient in situations such as hiring or customer perceptions–or experimental studies with vignettes, where there are no pre-existing relationships. This difference in salience of industry might explain the discrepancy between my null findings for industry type and the significant findings in other research, such as in recruitment and selection (e.g., Ruggs & Hebl, 2022).

(b) Statistical conclusion validity may be an issue as there could be more variance within each industry type than between the two groups of industry type. The two industry types included were broad categories, and as such, there could be too much variance within each group to detect between-group differences (Shadish et al., 2002). (c) In addition, this is an issue for

construct validity because the categories are broad and somewhat vague, with the traditional category comprised of accounting, finance and insurance, legal services, government and public administration, and the creative category comprised of arts, design, entertainment, recreation, graphic design, and fashion. These two categories are neither exhaustive nor specific. As such, this could be an issue of inadequate explication of constructs (Shadish et al., 2002). Taken together, these threats to statistical conclusion validity and construct validity could also explain the null findings of industry type.

Theoretical Implications

My three studies contribute to the growing understanding of tattoos in the workplace specifically, and stigma research more broadly. Taken together, my research has three important theoretical findings that support my conceptual model, namely that (1) the nature of the tattoo makes a difference, (2) we need to consider both the direct and indirect effects to obtain a full understanding of the effects of tattoos in the workplace, and (3) the context-specific nature of the stereotypes (i.e., the mediators) makes a difference.

First, I contribute to our understanding of how tattooed workers are perceived by colleagues on-the-job by demonstrating that the nature of the tattoo matters, and perceptions of tattooed workers can be positive or negative (see Appendices M1-M2 for tables summarizing my study results). The findings showed four positive outcomes: (a) Dark tattoo content resulted in greater perceived artisticness, and (b) light tattoo content also caused greater perceived artisticness (Study 1). (c) Dark tattoo content was indirectly related to less subtle discrimination through greater perceived artisticness (Studies 1 and 3). (d) Study 3 showed that perceived lightness of tattoo content was related to greater perceived competence, trustworthiness, and

artisticness, and lower perceived riskiness, which in turn, were related to more positive treatment, namely self-report interpersonal fairness, inclusion, and help seeking.

Despite the largely positive results, there was still one negative effect, which was consistent across all three studies: perceived riskiness mediated the indirect effects of dark tattoo content on negative treatment as seen in subtle discrimination, incivility, and ostracism. All three studies support this finding. (a) Study 1 provided experimental support for the causal effects of dark tattoo content on perceptions of riskiness, and (b) Study 2 provided experimental support for the causal effects of perceived riskiness on self-reported subtle discrimination, incivility, and ostracism. (c) Study 3 showed the indirect effects of perceived darkness of tattoo content on externally-rated and self-reported subtle discrimination, incivility, and ostracism through perceived riskiness in a field survey, with actual employees reporting on their tattooed colleagues, which enhances the validity of this finding by mitigating concerns of mono-method bias (i.e., construct validity; Shadish et al., 2002).

Second, the findings show that tattoo content has direct effects on tattoo-specific stereotypes, and indirect effects on observer treatment of tattooed colleagues through tattoo-specific stereotypes. Across Studies 1-3, there is support for (a) direct effects of dark tattoo content on tattoo-specific stereotypes (i.e., perceived artisticness and riskiness), (b) direct effects of perceived riskiness on negative treatment of colleagues (i.e., self-reported subtle discrimination, incivility, and ostracism), and (c) indirect effects of dark tattoo content on negative treatment through tattoo-specific stereotypes. These consistent findings indicate the importance of considering mediators, especially context-specific stereotypes, when examining how stigmatized characteristics affect observers' treatment of those who are stigmatized in the workplace.

Third, my research distinguishes between context-free and context-specific stereotypes about tattooed employees. I examined general stereotypes associated with stigmatized characteristics, namely perceptions of competence and trustworthiness, and stereotypes specific to tattooed individuals, namely perceptions of artisticness and riskiness. In Study 1, only the tattoo-specific stereotypes emerged as significant outcomes of tattoo content and mediators of the relationship between tattoo content and treatment of tattooed colleagues. In Study 2, the causal effects of perceived riskiness on negative treatment of colleagues were supported. Similarly, in Study 3, the tattoo-specific stereotypes of perceived artisticness and riskiness were significant outcomes of perceived darkness of tattoo content. Further, only the tattoo-specific stereotypes were significant mediators for the indirect relationships between perceived darkness of tattoo content and negative treatment of tattooed colleagues, namely externally-rated and self-reported subtle discrimination, incivility, and ostracism. In addition, perceived lightness of tattoo content was significantly related to both context-free and tattoo-specific stereotypes, and both context-free and tattoo-specific stereotypes were significant mediators of the indirect relationships between perceived lightness of tattoo content and positive treatment of tattooed colleagues, namely externally-rated and self-reported interpersonal fairness, inclusion, and help seeking. Taken together, the consistency in significant results for tattoo-specific stereotypes suggests that for stigma research, the context-specific stereotypes may be more consistent predictors of treatment towards individuals with stigmatized characteristics.

Practical Implications

The findings offer several practical implications. First, the stigma, or lack thereof, is not about the tattooed person; it is about the nature of the tattoo and the observer. As we saw in Study 1 and consistent with the notion of polysemy (i.e., the same nonverbal cue having more

than one meaning; Burgoon et al., 2022), the same tattoo can be perceived as a sign of artisticness as well as a sign of riskiness, with each differentially affecting subsequent treatment of tattooed colleagues. As a result, any interventions addressing tattoo-based discrimination in the workplace should focus on observer perceptions rather than what tattooed individuals should or should not do. For example, rather than counseling tattooed workers to cover their tattoos at work, it might be more beneficial and appropriate to address attitudes held by observers to mitigate stigma and discriminatory behaviours. Intergroup contact hypothesis indicates that greater contact with those who have a stigmatized characteristic can reduce stigma against that group, and meta-analyses have supported this hypothesis (e.g., Pettigrew & Tropp, 2006; Zhou et al., 2019). As such, interventions aimed at addressing attitudes could be particularly effective if they involve greater contact with or exposure to tattooed individuals.

In addition, this may be especially important in hiring situations; for example, as an interviewer, enhancing positive stereotypes of tattooed workers, and being aware of the signals sent to interviewees regarding acceptance of tattoos specifically, or self-expression more broadly, are important to consider. Further, the results emerged among tattooed and non-tattooed observers of tattooed colleagues, seen in the unchanged results when controlling for participant tattoo status and familiarity with tattoos, which suggests that any interventions should target both tattooed and non-tattooed employees.

Second, the findings suggest that perceptions of tattooed workers might be becoming more positive, even for those with tattoos that are dark in content, as witnessed in two different findings: the indirect effects of dark tattoo content on less subtle discrimination through perceived artisticness (Studies 1 and 3), and the indirect relationships between perceived lightness of tattoo content and more positive treatment of tattooed colleagues through greater

perceived competence, trustworthiness, artisticness, and lower perceived riskiness (Study 3). (a) In Studies 1 and 3, positive results emerged with observers perceiving those with dark content tattoos as more artistic, and in turn, treating them with less subtle discrimination, which suggests that with certain stereotypes as mediators, there is less discrimination towards even those with dark content tattoos. (b) In Study 3, there were positive perceptions (i.e., greater perceived competence, trustworthiness, artisticness, and lower perceived riskiness) and positive treatment from observers (i.e., more externally-rated and self-reported interpersonal fairness, inclusion, and help seeking) towards those with more light tattoo content.

Taken together, positive outcomes emerge in some cases depending on both the nature of the tattoo (dark versus light content) and the stereotypes elicited in how the observer perceives the tattooed colleague, indicating that perceptions of tattooed workers might be becoming more positive.

Strengths

My research has several conceptual and methodological strengths. From a conceptual perspective, the model that I developed (see Figure 1.1) is theory-based. In a domain which is largely devoid of theory, I draw on stigma theory (Link & Phelan, 2001) and expectancy violations theory (Burgoon, 2015; Burgoon & Hale, 1988), which provides a unique approach to theorizing about the effects of tattoos on observer perceptions and treatment, allowing for hypotheses as to why and how different types of tattoo content differentially affect perceptions and subsequent treatment of tattooed colleagues.

At least five methodological features of my research allow for important theoretical advances. First, the combination of the two randomized experiments of Studies 1 and 2 allows for causal inferences regarding my conceptual model (Pirlott & MacKinnon, 2016; Stone-

Romero & Rosopa, 2011). Second, measuring additional treatment outcomes for Studies 2 and 3 (namely, ostracism and incivility as negative treatment, and inclusion and help seeking as positive treatment) reduces threats from mono-operation bias (Shadish et al., 2002) of having only one negative (i.e., subtle discrimination) and one positive (i.e., interpersonal fairness) treatment outcome as I did in Study 1. Third, the significant findings for the externally-rated subtle discrimination and interpersonal fairness derived from the email writing task in Study 3 also addresses mono-operation and mono-method biases (Shadish et al., 2002) by providing a behavioural outcome rather than only self-report measures. Fourth, replicating findings from Studies 1 and 2 which were randomized experimental studies, with a field survey in Study 3 enhances construct validity of the findings by addressing mono-method bias (Shadish et al., 2002).

Finally, the experiment for Study 1 and field survey of Study 3 used partial disclosure, such that participants were not aware that the study was on tattooed workers or tattoo-related stereotypes until the end of the survey when they were debriefed, which limits the extent to which this information could have influenced participants' responses (i.e., demand effects). This partial disclosure makes it unlikely that demand characteristic effects led participants' responses because even when participants are provided with information regarding researchers' hypotheses, it is unlikely to significantly affect their responses (Mummolo & Peterson, 2019). Taken together, these strengths provide greater support for the conceptual model I developed about the indirect effects of dark and light tattoo content on treatment of tattooed colleagues through context-free and tattoo-specific stereotypes.

Limitations and Future Research Directions

Like all other research, there are several limitations of my research which provide important lessons for the future. These include questions about the choice of constructs based on theory, adequacy of the sample size, cross-sectional nature of the study designs, and mono-operation bias for the nature of the tattoo, tattoo placement and size, and tattoo coverage. In addition, one important future research direction is the incorporation of authenticity and identity into research on tattoos in the workplace.

First, I draw from stigma (Link & Phelan, 2001) and expectancy violations (Burgoon, 2015; Burgoon & Hale, 1988) theories to guide my conceptual model and predictions. However, I do not explicitly align the constructs in my model with the constructs described in the theories. As such, future research should test constructs from these theories in the context of tattooed colleagues to provide an even more theory-driven test of perceptions and treatment of tattooed colleagues. For example, expectancy violations theory includes several communication outcomes, such as reciprocity, credibility, and helping, which could be measured and examined as outcomes. Further, additional contextual factors, such as the formality of the situation in which observers are interacting with tattooed colleagues, could be incorporated based on expectancy violations theory. Formality has been tested in other contexts using expectancy violations theory, such as swearing at work, with swearing being perceived as more surprising in formal meetings vs social gatherings at work (Johnson & Lewis, 2010).

Second, the sample size could be limiting, particularly for the number of conditions in Study 1. Although we tend to think power analysis is key to determine an adequate sample size, it is not necessarily the optimal method. Power analyses may suggest sample sizes that are simply impractical (Hayes, 2022), and Tonidandel et al. (2014) question whether there is one best

way to establish appropriate sample sizes to test hypotheses. In addition, 5,000 bootstrapped samples mitigates sample size concerns by replicating the sampling distribution by resampling from the dataset 5,000 times, which enhances accuracy of the estimated effects and confidence intervals. For my research, I used 5,000 bootstrapped samples in my data analyses for Studies 1-3, which alleviates issues that can arise from having a smaller sample size.

Third, all three studies were cross-sectional in design. The methods of Studies 1 and 2 with the experimental vignette designs allows for causal inferences; however, this provides a static view of perceptions and treatment of tattooed colleagues. As such, a pre- and post-test design could provide a more dynamic view of how tattooed colleagues are perceived and treated. For example, this could be done by recruiting participants who have made an appointment for their first visible tattoo. First, these individuals would be asked if they would like to participate (with informed consent) and if they have a colleague who they can refer too. Then having each complete a survey before the participant gets their visible tattoo, and each complete a survey after the participant gets their visible tattoo. The pre- and post-tests would provide an understanding of whether perceptions and treatment change, and would enhance our understanding of both observers' and tattooed persons' perspectives.

Fourth, the nature of the tattoo was limited to two broad categories, namely dark versus light tattoo content. While an important step beyond much of the prior research that has focused on comparing a tattoo vs. no tattoo conditions, I still have only two broad categories which ignores nuance within dark and light tattoo content categories and excludes different ways of categorizing tattoo content (e.g., by style, such as American traditional style versus ornamental style). As a result, categorization into dark or light tattoo content still potentially raises threats to construct validity, namely mono-operation bias (Shadish et al., 2002). Even though my

manipulation checks and confirmatory factor analyses provide support for the construct validity of dark and light tattoo content, exploring nuances within these categories, or categorizing in different ways (e.g., by style, or colour vs. black and grey) could deepen and/or widen our understanding of the effects of the nature of different tattoos. Future research could investigate tattoo content further by comparing specific tattoo styles, or exploring dark and light categories further (e.g., separating dark tattoo content into intimidating/threatening vs tough/masculine), which would delve further into the nuance of the role tattoo content plays in perceptions and treatment of tattooed colleagues. As one example, comparing American traditional tattoo style to ornamental style tattoos.

American traditional style tattoos have simple yet bold designs with thick black outlines and limited colours (e.g., anchors, skulls, the classic red heart with a banner that says 'mom'). This style is similar to designs typically seen on sailors and motorcyclists in the 1900s. Historically, the stigma towards tattooed individuals in North America largely derives from the association with sailors, bikers, and gang members, who typically had American traditional style tattoos. As a result, American traditional tattoos would likely be a negative expectancy violation, and we might see American traditional style tattoos associated with greater perceived riskiness, and in turn, observers behaving in more discriminatory ways towards colleagues with American traditional tattoos. Further, these tattoos often involve the same designs on different people with limited variation therefore, the same designs that were historically seen on sailors and bikers are still around today.

In contrast, ornamental style is typically more delicate and elegant with decorative patterns, finer lines, and lighter shading. Tattoos in this style often resemble jewelry and include designs such as mandalas. These ornamental designs are typically more customized to the tattoo

wearer and more often complement their natural shape. As such, ornamental tattoo styles would likely be a positive violation of expectations due their delicate nature and not being seen in the traditionally stigmatized context. As a result of the customized nature and not being associated with the traditionally stigmatized context of tattoos, we might see ornamental style tattoos associated with greater perceived artisticness and subsequently more respectful behaviours towards colleagues with ornamental style tattoos.

Taken together, the bold American traditional tattoos that originated in the historically stigmatized groups, such as sailors and bikers, being compared to the delicate ornamental tattoos that are relatively newer and more customized, could provide a deeper understanding of the tattoo-specific stereotypes of perceived riskiness and artisticness in the indirect effects of tattoo content on observer treatment of tattooed colleagues through tattoo-specific stereotypes.

Fifth, I did not manipulate tattoo placement or size, both of which might influence perceptions and (mis)treatment. For Study 1, I placed the tattoos only on the forearm, and having only one placement raises the possibility of mono-operation bias again (i.e., a threat to construct validity; Shadish et al., 2002). The forearm is generally considered an innocuous tattoo placement: qualitative studies in selection research find that most hiring managers claim to be generally accepting of tattoos unless they are on the hands, neck, or face (e.g., Antonellis & Silsbee, 2018; Efthymiou, 2018). As such, any effects of dark tattoo content may well be greater if placed on the hands, neck, or face. As for light tattoo content, manipulating the tattoo placement and size would provide insight as to whether it is the content of the tattoo specifically that was responsible for the null findings in Study 1.

Similarly, the extent of tattoo coverage could affect how observers perceive tattooed colleagues. However, prior quantitative studies on tattooed employees have not found tattoo

visibility – which although is not coverage per se, the more coverage one has, the more likely they are to have more visible tattoos – to have any significant effects (e.g., Tews & Stafford, 2020b). In contrast, the results of qualitative sociological research suggests there are differences in reactions from and interactions with observers in public when heavily tattooed, compared to not being tattooed (Irwin, 2003) or being lightly tattooed (Thompson, 2015). For example, heavily tattooed individuals receive unsolicited questions and opinions from strangers in public, such as being asked "why would you do that to yourself" (Thompson, 2015). Future research should take a closer look at the coverage or extent of tattooing, such as comparing a full bodysuit tattoo with a sleeve tattoo or a few small tattoos, to determine if differences exist between being heavily tattooed to being lightly tattooed in the workplace.

Sixth, while some previous research has examined the interaction of tattoos and piercings (e.g., Tetteh et al., 2022) as two forms of body modifications, this could be further examined in future research by exploring the nuance of tattoo content and piercings. For example, research could examine if adding facial piercings changes the effects of dark and light tattoo content on perceptions and treatment of colleagues. Further, the extent of facial piercings could play a role with possible differences between one facial piercing and tattoos vs many facial piercings and tattoos.

Last but by no means least, another area for future research is incorporating personal identity, authenticity, and motivation for having tattoos. Sociological research has distinguished between those who have tattoos and those who are tattooed persons; the former apply to people who have tattoos but do not see them as particularly important to their identity, whereas the latter see tattoos as a core aspect of their identity, feel tattoos enhance their sense of authenticity, and are more involved in tattoo culture (Roberts, 2012; Roberts, 2015; Thompson, 2015). This ties

into personal motivation for having tattoos, because motivations differ between (and among) these groups. For some tattooed people, their motivation involves memorializing people, places, or salient events or experiences in their lives, motivations that would be thought of by others as more meaningful and therefore acceptable. Other tattooed people may be inspired by the artwork for aesthetic purposes or a deep meaning of feeling like their more true selves, which are often perceived by others as less acceptable motivations for having tattoos (e.g., Larsen et al., 2014). This is relevant for observer perceptions in the workplace because, in some cases, observers such as hiring managers say that the meaning of the tattoo matters for how they feel towards tattooed persons, including job applicants (e.g., Cortini et al., 2019). As such, we might see observers perceiving tattoos with deeper meaning as more acceptable and thus less stigmatized compared to tattoos without any deep meaning.

Conclusion

In my dissertation, I set out to understand how tattooed workers are perceived and treated by their colleagues, the role of tattoo content, and contextual boundary conditions. Along the way, I learned several valuable lessons from my three studies. First, while social discourse often speaks about prejudice and stereotypes toward tattooed workers, my findings indicate that this is not necessarily accurate: instead, it is the nature of the tattoos (i.e., dark vs light content), and stereotypes elicited in observer perceptions of tattooed colleagues that frame how observers behave towards their tattooed colleagues. Second, stigma research tends to focus on context-free stereotypes, such as perceived competence and trustworthiness; however, my research suggests that context-specific stereotypes, such as the tattoo-specific stereotypes of perceived artisticness and riskiness, are essential to our understanding of the effects of stigma.

Third, hierarchical position of the tattooed colleague seems to matter: the benefits of positive expectancy violations emerge for tattooed colleagues of an equal or lower hierarchical position, relative to the observer, but not those of a higher-level position, relative to the observer. Fourth, despite widespread beliefs that tattoos and associated perceptions such as riskiness and artisticness are gendered, my Studies 1 and 2 provide some evidence to dispel stereotypes of the gendered nature of tattoos and tattoo-specific stereotypes. Taken together, my research enhances our understanding of tattoos at work, and could be a wonderful bellwether for understanding discrimination against stigmatized characteristics in the workplace in general.

References

Antonellis Jr, P., & Silsbee, R. (2018). Employment interview screening: Time to face the ink. *Journal of Business & Economic Policy, 5*(4), 44-53.

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323-370.

Brallier, S. A., Maguire, K. A., Smith, D. A., & Palm, L. J. (2011). Visible tattoos and employment in the restaurant service industry. *International Journal of Business and Social Science*, *2*(6), 72-76.

Burgoon, J.K. (2015). Expectancy violations theory. In Berger, C.R., Roloff, M.E., Wilson, Dillard, J.P., Caughlin, J., & Solomon, D. (Eds.), *The international encyclopedia of interpersonal communication*. Wiley.

Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communications Monographs, 55*(1), 58-79.

Burgoon, J. K., Manusov, V., & Guerrero, L. K. (2022). *Nonverbal communication* (2nd ed.). Routledge.

Cortini, M., Bortune, R., & Fantinelli, S. (2019). Personnel selection and body art. A mix-method study on tattooed job candidates. *International Journal of Scientific and Technological Research, 8*(9), 1966-1970.

Dean, D. H. (2011). Young adult perception of visible tattoos on a white-collar service provider. *Young Consumers*, *12*(3), 254-264.

Efthymiou, L. (2018). Worker body-art in upper-market hotels: Neither accepted, nor prohibited. *International Journal of Hospitality Management, 74*, 99-108.

Efthymiou, L., Orphanidou, Y., & Karayiannis, A. (2023). The impact of workers' tattoos and piercings on employment: Suggestions for pragmatic career planning. In A. Broadbridge (Ed.). *The Emerald Handbook of Appearance in the Workplace* (pp. 301-316). Emerald Publishing Limited.

Fiske, S. T. (2018). Stereotype content: Warmth and competence endure. *Current Directions in Psychological Science*, *27*(2), 67-73.

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Publications.

Henderson, A. A., Matthews, R. A., McKersie, S. J., & Whitman, M. V. (2022). Leading when overweight: The influence of supervisor body weight on subordinates' perceptions and citizenship behaviors. *Journal of Business and Psychology*, *37,* 615-631.

Henle, C. A., Shore, T. H., Murphy, K. R., & Marshall, A. D. (2022). Visible tattoos as a source of employment discrimination among female applicants for a supervisory position. *Journal of Business and Psychology*, *37*, 107-125.

Irwin, K. (2003). Saints and sinners: Elite tattoo collectors and tattooists as positive and negative deviants. *Sociological Spectrum*, *23*(1), 27-57.

Johnson, D. I., & Lewis, N. (2010). Perceptions of swearing in the work setting: An expectancy violations theory perspective. *Communication Reports*, *23*(2), 106-118.

Kincaid, P. A., Short, J. C., & Wolfe, M. T. (2022). Got ink, get paid? Exploring the impact of tattoo visibility on crowdfunding performance. *Journal of Business Venturing Insights, 17*, e00317.

Larsen, G., Patterson, M., & Markham, L. (2014). A deviant art: Tattoo-related stigma in an era of commodification. *Psychology & Marketing*, *31*(8), 670-681.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual review of Sociology*, *27*(1), 363-385.

Mummolo, J., & Peterson, E. (2019). Demand effects in survey experiments: An empirical assessment. *American Political Science Review*, *113*(2), 517-529.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*(5), 751-783.

Pirlott, A. G., & MacKinnon, D. P. (2016). Design approaches to experimental mediation. *Journal of Experimental Social Psychology*, *66*, 29-38.

Roberts, D. J. (2012). Secret ink: Tattoo's place in contemporary American culture. *The Journal of American Culture*, *35*(2), 153.

Roberts, D. (2015). Modified people: Indicators of a body modification subculture in a post-subculture world. *Sociology*, *49*(6), 1096-1112.

Ruggs, E. N., & Hebl, M. R. (2022). Do employees' tattoos leave a mark on customers' reactions to products and organizations? *Journal of Organizational Behavior, 43*(6), 965-982.

Shadish, W.R., Cook, T.D., & Campbell, D.T. (2002). *Experimental and quasi-experimental designs for generalized causal experiments*. Wadsworth Publishing.

Skowronski, J. J., & Carlston, D. E. (1987). Social judgment and social memory: The role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, *52*(4), 689-699.

Skowronski, J. J., & Carlston, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin*, *105*(1), 131-142.

Stone-Romero, E. F., & Rosopa, P. J. (2011). Experimental tests of mediation models: Prospects, problems, and some solutions. *Organizational Research Methods*, *14*(4), 631-646.

Tetteh, D. L. K., Annor, F., & Abdul-Nasiru, I. (2022). Do visible body modifications influence job applicants' perceived employability in Ghana? A quasi-experimental study. *Ghana Social Science Journal*, *19*(2), 1-18.

Tews, M. J., Stafford, K., & Kudler, E. P. (2020). The influence of tattoo content on perceptions of employment suitability across the generational divide. *Journal of Personnel Psychology, 19*(1), 4-13.

Tews, M. J., & Stafford, K. (2020a). Tattoos and perceptions of employment suitability in the hospitality industry. *Journal of Human Resources in Hospitality & Tourism*, *19*(2), 148-167.

Tews, M. J., & Stafford, K. (2020b). Tattoos and unfavorable treatment among employees in the hospitality industry. *International Journal of Contemporary Hospitality Management*, *32*(5), 1925-1940.

Thompson, B. Y. (2015). *Covered in ink: Tattoos, women and the politics of the body*. New York University Press.

Timming, A. R. (2017). Body art as branded labour: At the intersection of employee selection and relationship marketing. *Human Relations*, *70*(9), 1041-1063.

Tonidandel, S., Williams, E. B., & LeBreton, J. M. (2014). Size matters… just not in the way that you think: Myths surrounding sample size requirements for statistical analyses. In Lance, C. E. & Vandenberg, R. J. (Eds.). *More statistical and methodological myths and urban legends* (pp. 162-183). Routledge.

Verissimo, A., Tolle, S. L., McCombs, G., & Arndt, A. (2016). Assessing dental clients' perceptions of dental hygienists with visible tattoos. *Canadian Journal of Dental Hygiene*, *50*(3), 109-115.

Zhou, S., Page-Gould, E., Aron, A., Moyer, A., & Hewstone, M. (2019). The extended contact hypothesis: A meta-analysis on 20 years of research. *Personality and Social Psychology Review*, *23*(2), 132-160.

Zidenberg, A. M., Dutrisac, S., & Olver, M. (2022). "No ragrets": Public perceptions of tattooed mental health professionals. *Professional Psychology: Research and Practice*, *53*(3), 304-312.

Appendices

Appendix A1: Pilot Study 1 Tattoo Images

Light Image 1 (chosen light image)

Light Image 2

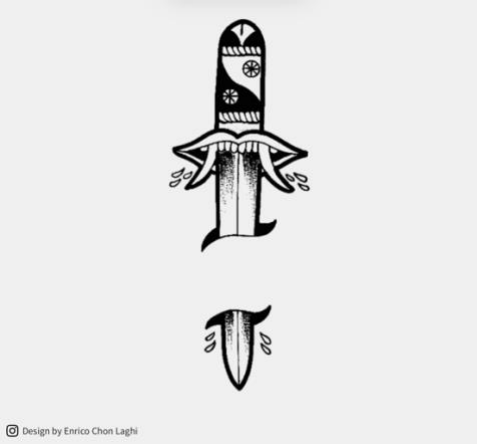
Light Image 3

Light Image 4

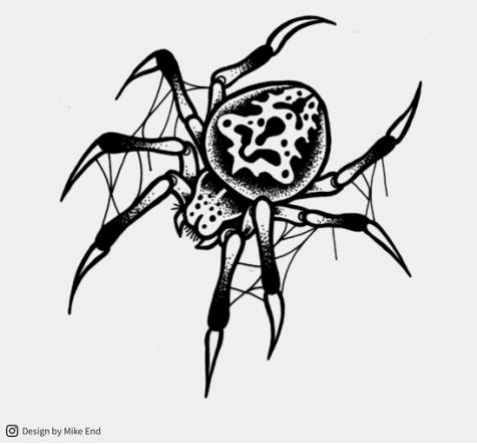
Light Image 5

Dark Image 1 (chosen dark image)

Dark Image 2



Dark Image 3



Dark Image 4

Dark Image 5

Appendix A2: Pilot Study 1 Stock Images of People

Chosen pair:

Other images tested:

Appendix B: Pilot Study 2 Images

Image of Interest 1: Woman with light tattoo

Image of Interest 2: Woman with dark tattoo

Image of Interest 3: Man with light tattoo

Image of Interest 4: Man with dark tattoo

Woman with Actual Tattoo

Man with Actual Tattoo

Woman Distractor Image

Man Distractor Image

Appendix C: Study 1 Vignette Images

Woman – no tattoo

Woman – light tattoo content

Woman – dark tattoo content

Man – no tattoo

Man – light tattoo content

Man – dark tattoo content

Appendix D: Study 1 Written Vignette

Meet Alex Johnson, your coworker/direct supervisor/supervisor's supervisor. Alex is a professional with a calm demeanor, known for maintaining an organized workspace. Task-oriented and collaborative, she/he approaches assignments systematically and contributes thoughtfully in meetings. Recognized for her/his reliability, Alex is viewed as a dependable team member in the routine office environment.

You have no personal relationship with Alex, but have worked with her/him for 6 months now. Alex is someone you see most days at work.

Please take a moment to review this information about Alex as you will be asked a series of questions about her/him on the following pages.

Appendix E: Study 1 Measures

Perceived Competence (Fiske, 2018)
Please rate how well the following traits describe Alex.
Competence
1 = not well at all; 7 = very well

1. Competent
2. Intelligent
3. Skilled
4. Efficient
5. Assertive
6. Confident

Perceived Trustworthiness (Ohanian, 1990)
Please place Alex on the scales below based on your perception of them.
1-7

1. Undependable–Dependable
2. Dishonest–Honest
3. Unreliable–Reliable
4. Insincere–Sincere
5. Untrustworthy–Trustworthy

Perceived Riskiness (Ruggs & Hebl, 2022)
Please rate how well you believe the following traits describe Alex.
1 = not well at all; 7 = very well

1. Risky
2. Edgy
3. Irresponsible
4. Dangerous

Perceived Artisticness (Ruggs & Hebl, 2022 with added items)
Please rate how well you believe the following traits describe Alex.
1 = not well at all; 7 = very well

1. Artistic
2. Creative
3. Imaginative
4. Aesthetic
5. Innovative
6. Inventive
7. Original

Email Task (Scanlon, 2025)
(coded by trained RAs for subtle discrimination and interpersonal fairness)

"Imagine your colleague, Alex Johnson, sent you the email below, please write an email responding to her/his email."

Good morning,

I was wondering if you would be able to help me with a project I am working on? It would require meeting a few times over the coming weeks and putting together some documents that will be presented at my next meeting with the client. I will also need help getting through some of the transcripts from the most recent round of interviews.

I realize you have a lot on your plate right now and that quarterly deadlines are approaching, but if you are able to provide assistance, it would be greatly helpful.

Please let me know at your earliest convenience so we can set up a time to meet if need be.

Thank you,

Alex Johnson

Reply below: _____
_____
_____

Now, imagine that you are assigned to work with Alex Johnson.
Please rate the following items to reflect how you would feel and behave in this situation.

Subtle Discrimination
1 = *strongly disagree* to 5 = *strongly agree*

1. I would discount anything Alex said to me.
2. I would not be able to take Alex seriously.
3. I would disregard directions from Alex.
4. I would ignore Alex's ideas.
5. I would withdraw from work assigned to me by Alex.
6. I would not be willing to take advice from Alex.
7. I would avoid Alex at work.
8. I would not go out of my way to help Alex.

Interpersonal Fairness (items 1-4 from Colquitt, 2001; Colquitt & Rodell, 2015; items 5-9 from Moorman, 1991)
1 = *strongly disagree* to 5 = *strongly agree*

1. I would treat Alex in a polite manner.
2. I would treat Alex with dignity.
3. I would treat Alex with respect.
4. I would refrain from making improper remarks/comments to Alex.
5. I would consider Alex's viewpoint.
6. I would provide Alex with timely feedback about decisions and implications.
7. I would treat Alex with kindness and consideration.

8. I would show concern for Alex's rights.
9. I would deal with Alex in a truthful manner.

Manipulation Checks

1. What was Alex's gender?
    a. Woman
    b. Man
2. What was Alex's job position in relation to you?
    a. Your coworker
    b. Your direct supervisor
    c. Your supervisor's supervisor
3. Did Alex have a tattoo?
    a. Yes
    b. No

**if participants answered "yes" to Alex having a tattoo, the following question was presented*

4. What was the tattoo?
    a. Roses and leaves
    b. A skull and knife

Participant Demographics

Openness to Experience (Donnellan et al., 2006 Mini-IPIP)

Below are phrases describing people's behaviors. Please use the rating scale below to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future.

1 = very inaccurate, 2 = moderately inaccurate, 3 = neither inaccurate nor accurate, 4 = moderately accurate, 5 = very accurate

1. I have a vivid imagination.
2. I am not interested in abstract ideas. (R)
3. I have difficulty understanding abstract ideas. (R)
4. I do not have a good imagination. (R)

Gender

1. How do you self-identify in terms of gender?
    a. Woman
    b. Man
    c. I do not identify with the gender binary
    d. I prefer not to disclose information concerning my gender

Age

2. Please indicate your current age (in years).

Work experience

1. How many hours per week do you work?
2. Do you have leadership experience?
    a. Yes
    b. No

3. If yes, how much leadership experience do you have?
4. What leadership positions have you held?

Tattoos

1. Do you have any tattoos?
    a. No
    b. Yes
2. How familiar are you with tattoos?
    a. Not at all
    b. Slightly
    c. Moderately
    d. Very
    e. Extremely

Ethnicity

Please select your ethnicity:

- White
- South Asian (e.g., East Indian, Pakistani, Sri Lankan)
- Chinese
- Black
- Filipino
- Arab
- Latin American
- Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai)
- West Asian (e.g., Iranian, Afghan)
- Korean
- Japanese
- Indigenous
- Other group—specify
- I prefer not to say

Socioeconomic Status

Think of this ladder as representing where people stand in the United States. At the **top** of the ladder are the people who are best off – those who have the most money, the most education, and the most respected jobs. At the **bottom** are the people who are worst off – who have the least money, least education, and the least respected jobs or no job. The higher you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom

Where would you place yourself on this ladder?

Please place a large **"X"** on the rung where you think you stand at this time in your life, relative to other people in the United States.

Appendix F: Additional Study 1 Tables

Table F1

Correlations for Study 1 Participant Variables

Variables (referring to participants)	1	2	3	4
1. Gender				
2. Age	.06			
3. Tattoo status	.21**	-.04		
4. Tattoo familiarity	.15**	.01	.31**	
5. Openness	.05	.01	.01	.18**

Note. N = 448-455. Gender is dummy coded such that men = 0 and women = 1. Tattoo status is dummy coded such that no = 0 and yes = 1. Openness = openness to experience.
* $p < .05$, ** $p < .01$

Table F2

Correlations for Study 1 Variables and Participant Variables

Variables	Gender	Age	Tattoo Status	Tattoo Familiarity	Openness
1. No tattoo	-.06	.06	-.07	-.04	.01
2. Dark tattoo	-.03	-.03	.05	.09*	-.03
3. Light tattoo	.10*	-.04	.03	-.05	.02
4. Coworker	-.10*	-.12**	-.01	-.05	-.01
5. Supervisor	.04	.06	.03	.07	-.03
6. Supervisor's supervisor	.07	.07	-.02	-.02	.04
7. Gender	-.02	-.07	.03	.04	-.02
9. Competence	.04	.02	-.001	.15**	.24**
10. Trustworthiness	.11*	.10*	-.01	.06	.12*
11. Artisticness	-.11*	.04	-.07	.10*	.18**
12. Riskiness	-.11*	-.10*	.04	-.07	-.14**
13. SD (self-report)	.003	-.05	-.07	-.12*	-.11*
14. SD (external-rated)	-.12*	.01	-.10*	-.11*	-.01
15. IF (self-report)	.11*	.10*	.10*	.09	.10*
16. IF (external-rated)	.13**	-.04	.04	.07	.03

Note. N = 448-455. Variables across the top refer to the participants. Gender is dummy coded such that men = 0 and women = 1. Tattoo status is dummy coded such that no = 0 and yes = 1. Openness = openness to experience. Variables 1-8 refer to conditions, and 9-12 refer to perceptions. SD = subtle discrimination. IF = interpersonal fairness.
* $p < .05$, ** $p < .01$

Appendix G1: Study 2 Pilot Initial Written Vignettes

Intro for all:

Both you and Tanya/Tanner have been employed by the same organization for almost three years. For the last 15 months, you have both worked closely in the same department and come to appreciate each other's strengths and weaknesses.

Risky:

From what you have learned, you perceive Tanya/Tanner as unpredictable and edgy. You think Tanya/Tanner dresses sharply, and there's almost always something slightly off about her/his appearance. Tanya/Tanner is perceived as pushing the boundaries of office etiquette, and often testing company norms and values. She/he seems to thrive on taking risks, whether it's making bold, unvetted decisions in projects, or engaging in office gossip.

You think Tanya/Tanner if often irresponsible based on her/his decisions and you think Tanya/Tanner takes short cuts when she/he thinks they won't get caught. Tanya/Tanner has a reputation for bending the rules, occasionally breaking them entirely thereby introducing unnecessary danger and uncertainty into the workplace.

You believe Tanya/Tanner creates chaos and disrupts the office environment, whether it's through risky decision making or unpredictable behaviour.

Artistic:

From what you have learned, you perceive Tanya/Tanner as creative and original. You think Tanya/Tanner dresses sharply, and there's always a clear aesthetic about her/his appearance. Tanya/Tanner is perceived as having artistic flair in the office, and often bringing fresh, creative perspectives. She/he seems to thrive on having an innovative mindset, whether it's coming up with inventive solutions to problems, or crafting something unique.

You think Tanya/Tanner is often creative based on her/his decisions and you think Tanya/Tanner comes up with ideas that are both bold and original. Tanya/Tanner has a reputation for her/his distinct, creative contributions, thereby introducing underlying wonder and possibility into the workplace.

You believe Tanya/Tanner creates beauty and transforms the office environment, whether it's an innovative decision or an inspirational idea in a meeting.

Good Worker Comparison:

From what you have learned, you perceive Tanya/Tanner as reliable and consistent. You think Tanya/Tanner dresses sharply, and there's a professional manner about her/his appearance. Tanya/Tanner is perceived as having a functional and tidy workspace, and often approaching work in a straightforward manner. She/he seems to thrive on staying professional, whether it's maintaining stability in the office, or ensuring that tasks are completed.

You think Tanya/Tanner is dependable based on her/his decisions and you think she/he handles tasks efficiently and without fuss. Tanya/Tanner has a reputation for her/his effective completion of work tasks, thereby introducing underlying predictability and responsibility into the workplace.

You believe Tanya/Tanner creates organization and maintains the office environment, whether it's ensuring that projects are completed, or staying professional in a meeting.

Final sentences for all:

Tanya/Tanner is someone you see most days at work and you will be continuing to work with her/him.

Please take a moment to review this information about Tanya/Tanner as you will be asked a series of questions about her/him on the following pages.

Appendix G2: Study 2 Final Written Vignettes

Intro for all:

Both you and Tanya/Tanner have been employed by the same organization for almost three years. For the last 15 months, you have both worked closely in the same department and come to appreciate each other's strengths and weaknesses.

Risky:

From what you have learned, you perceive Tanya/Tanner as unpredictable and edgy. You think Tanya/Tanner dresses strikingly, and there's always a clear recklessness about her/his appearance. Tanya/Tanner is perceived as pushing the boundaries of office etiquette, and often testing company norms and values. She/he seems to thrive on taking risks, whether it's making bold, unvetted decisions in projects, or engaging in office gossip.

You think Tanya/Tanner is often irresponsible based on her/his decisions and you think Tanya/Tanner takes short cuts when she/he thinks they won't get caught. Tanya/Tanner has a reputation for bending the rules, or breaking them entirely, thereby introducing unnecessary danger and uncertainty into the workplace.

You believe Tanya/Tanner creates chaos and disrupts the office environment, whether it's through risky decision making or unpredictable behaviour.

Artistic:

From what you have learned, you perceive Tanya/Tanner as creative and original. You think Tanya/Tanner dresses fashionably, and there's always a clear aesthetic about her/his appearance. Tanya/Tanner is perceived as having artistic flair in the office, and often bringing fresh and creative perspectives. She/he seems to thrive on having an innovative mindset, whether it's coming up with inventive solutions to problems, or crafting something unique.

You think Tanya/Tanner is often creative based on her/his decisions and you think Tanya/Tanner comes up with ideas that are both bold and original. Tanya/Tanner has a reputation for her/his distinct ideas and creative contributions, thereby introducing wonder and possibility into the workplace.

You believe Tanya/Tanner creates beauty and transforms the office environment, whether it's through innovative decisions or inspirational ideas in meetings.

Good Worker Comparison:

From what you have learned, you perceive Tanya/Tanner as reliable and consistent. You think Tanya/Tanner dresses sharply, and there's a professional manner about her/his appearance. Tanya/Tanner is perceived as having a functional and tidy workspace, and often approaching work in a straightforward manner. She/he seems to thrive on staying professional, whether it's maintaining stability in the office, or ensuring that tasks are completed.

You think Tanya/Tanner is dependable based on her/his decisions and you think she/he handles tasks efficiently and without fuss. Tanya/Tanner has a reputation for her/his effective completion of work tasks, thereby introducing underlying predictability and responsibility into the workplace.

You believe Tanya/Tanner creates organization and maintains the office environment, whether it's ensuring that projects are completed, or staying professional in a meeting.

Final sentences for all:

Tanya/Tanner is someone you see most days at work and you will be continuing to work with her/him.

Please take a moment to review this information about Tanya/Tanner as you will be asked a series of questions about her/him on the following pages.

Appendix H: Study 2 Pilot Survey Questions

Perceived Riskiness (Ruggs & Hebl, 2022)
Please rate how well you believe the following traits describe Tanya/Tanner.
1 = not well at all; 7 = very well

1. Risky
2. Edgy
3. Irresponsible
4. Dangerous

Perceived Artisticness (Ruggs & Hebl, 2022 with added items)
Please rate how well you believe the following traits describe Tanya/Tanner.
1 = not well at all; 7 = very well

1. Artistic
2. Creative
3. Imaginative
4. Aesthetic
5. Innovative
6. Inventive
7. Original

Gender Manipulation Check

1. What was the gender of the person you read about?
    a. Woman
    b. Man

Participant Demographics

Gender

1. How do you self-identify in terms of gender?
    a. Woman
    b. Man
    c. I do not identify with the gender binary
    d. I prefer not to disclose information concerning my gender

Age

2. Please indicate your current age (in years).

Ethnicity
Please select your ethnicity:

- White
- South Asian (e.g., East Indian, Pakistani, Sri Lankan)
- Chinese
- Black
- Jewish
- Filipino
- Arab

- Latin American
- Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai)
- West Asian (e.g., Iranian, Afghan)
- Korean
- Japanese
- Indigenous
- Other group—specify
- I prefer not to say

Socioeconomic Status

Think of this ladder as representing where people stand in Canada. At the **top** of the ladder are the people who are best off – those who have the most money, the most education, and the most respected jobs. At the **bottom** are the people who are worst off – who have the least money, least education, and the least respected jobs or no job. The higher you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom

Where would you place yourself on this ladder?

Please place a large **"X"** on the rung where you think you stand at this time in your life, relative to other people in Canada.

School and Work experience

1. What year of your program are you in?
2. Are you employed?
3. If yes, how many hours per week do you work?

Appendix I: Study 2 Survey Questions

Email Task (Scanlon, 2025)
(coded by trained RAs for subtle discrimination and interpersonal fairness)

"Imagine your colleague, Tanya/Tanner, sent you the email below, please write an email responding to her/his email."

Good morning,

I was wondering if you would be able to help me with a project I am working on? It would require meeting a few times over the coming weeks and putting together some documents that will be presented at my next meeting with the client. I will also need help getting through some of the transcripts from the most recent round of interviews.

I realize you have a lot on your plate right now and that quarterly deadlines are approaching, but if you are able to provide assistance, it would be greatly helpful.

Please let me know at your earliest convenience so we can set up a time to meet if need be.

Thank you,

Tanya/Tanner Smith

Reply below: _____
_____
_____

Now, imagine that you are assigned to work with Tanya/Tanner.
Please rate the following items to reflect how you would feel and behave in this situation.

Subtle Discrimination
1 = *strongly disagree* to 5 = *strongly agree*

1. I would discount anything she/he said to me.
2. I would not be able to take her/him seriously.
3. I would disregard directions from her/him.
4. I would ignore her/his ideas.
5. I would withdraw from work assigned to me by her/him.
6. I would not be willing to take advice from her/him.
7. I would avoid her/him at work.
8. I would not go out of my way to help her/him.

Interpersonal Fairness (items 1-4 from Colquitt, 2001; Colquitt & Rodell, 2015; items 5-9 from Moorman, 1991)

1 = *strongly disagree* to 5 = *strongly agree*

1. I would treat her/him in a polite manner.
2. I would treat her/him with dignity.
3. I would treat her/him with respect.
4. I would refrain from making improper remarks/comments to her/him.
5. I would consider her/his viewpoint.
6. I would provide her/him with timely feedback about decisions and implications.
7. I would treat her/him with kindness and consideration.
8. I would show concern for her/his rights.
9. I would deal with her/him in a truthful manner.

Incivility (Cortina et al., 2001)

1 = *never* to 5 = *always*

1. Put down or be condescending to her/him.
2. Pay little attention to her/his statements or show little interest in her/his opinion.
3. Make demeaning or derogatory remarks about her/him.
4. Address her/him in unprofessional terms, either publicly or privately.
5. Ignore or exclude her/him from professional camaraderie.
6. Doubt her/his judgement on a matter over which she/he has responsibility.
7. Make unwanted attempts to draw her/him into a discussion of personal matters.

Ostracism (Ferris et al., 2008)

1 = *never* to 5 = *always*

1. You would ignore her/him at work.
2. Others would leave the area when she/he entered.
3. Her/his greetings would go unanswered at work.
4. She/he would involuntarily sit alone in a crowded lunchroom at work.
5. Others would avoid her/him at work.
6. You would notice others would not look at her/him at work.
7. Others at work would shut her/him out of the conversation.
8. Others would refuse to talk to her/him at work
9. Others at work would treat her/him as if she/he weren't there.
10. Others at work would not invite her/him or ask her/him if she/he wanted anything when they went out for a coffee break.

Inclusion/Exclusion Work Group Involvement (Mor-Barak & Cherin, 1998)

1 = *strongly disagree* to 5 = *strongly agree*

1. She/he would feel part of informal discussion in the work group.
2. She/he would feel isolated from the work group.
3. Work group members wouldn't share information with her/him.
4. People in the work group wouldn't listen to what she/he says.
5. Her/his judgement would be respected by members of the work group.
6. Work group members would make her/him feel a part of decisions.

Help seeking (Nadler et al., 2006)
1 = *never* to 10 = *a lot*

1. Please rate the extent to which you would approach Tanya/Tanner for help if you were having difficulty on a work assignment.

Participant Demographics

Gender

1. How do you self-identify in terms of gender?
    a. Woman
    b. Man
    c. I do not identify with the gender binary
    d. I prefer not to disclose information concerning my gender

Age

2. Please indicate your current age (in years).

Ethnicity

Please select your ethnicity:

- White
- South Asian (e.g., East Indian, Pakistani, Sri Lankan)
- Chinese
- Black
- Jewish
- Filipino
- Arab
- Latin American
- Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai)
- West Asian (e.g., Iranian, Afghan)
- Korean
- Japanese
- Indigenous
- Other group—specify
- I prefer not to say

Socioeconomic Status

Think of this ladder as representing where people stand in the United States. At the **top** of the ladder are the people who are best off – those who have the most money, the most education, and the most respected jobs. At the **bottom** are the people who are worst off – who have the least money, least education, and the least respected jobs or no job. The higher you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom

Where would you place yourself on this ladder?

Please place a large **"X"** on the rung where you think you stand at this time in your life, relative to other people in the United States.

Work experience

1. How many hours per week do you work?

Appendix J: Study 3 Survey Items

Pre-screening Questions:

1. What is your age?
    a. 18-24 years old
    b. 25-34 years old
    c. 35-44 years old
    d. 45-54 years old
    e. 55 years or older
2. How many hours do you work per week?
    a. Less than 10 hours/week
    b. 10-20 hours/week
    c. 21-30 hours/week
    d. Over 30 hours/week
3. Please confirm the industry in which you work.
    a. Arts design recreation and entertainment
    b. Finance and Insurance
    c. Government and Public Administration
    d. Graphic Design
    e. Legal Services
    f. Accounting
    g. Fashion
    h. Other not listed
4. Where do you usually work?
    a. Always from a central place of work
    b. Sometimes from a central place of work, sometimes remotely
    c. Always remotely
5. Which of the following statements best describes your supervisory responsibilities at your current job?
    a. I do not supervise anyone
    b. I supervisor other employees
    c. I supervisor other employees, some of whom supervise others

For the following questions, a colleague can be a coworker, supervisor, or manager. But it must be someone on the same work team that you work with in-person all or some of the time.

1. Do you have a colleague who has tattoos?
2. Do you have a colleague that smokes cigarettes?
3. Do you have a colleague with a visible physical disability?
4. Do you have a colleague who is overweight?
5. Do you have a colleague who is a refugee?

Main survey:

You answered yes that you have a colleague with tattoos. We would now like to ask more detailed questions about this colleague. If you have more than one colleague with tattoos, please pick one colleague to think of while answering the questions in this survey.

1. This colleague is a…
    a. Coworker
    b. Supervisor
    c. Manager
    d. Employee/follower

Please use the text box below to describe your colleague's tattoo(s). In the description, please include information such as the number of tattoos, extent of visible skin covered, how visible the tattoos are, if the tattoos are black and grey or color, what sort of designs, and provide as much detail as you can.

Thinking of the colleague that you identified as having tattoos, please rate the extent to which each adjective below describes your colleagues' tattoos.
1 = not at all to 5 = completely

Tattoo Content
Dark tattoo content (Tews & Stafford, 2020):
1. Deviant
2. Gothic
3. Intimidating
4. Masculine
5. Rebellious
6. Threatening
7. Tough

Light tattoo content (Tews & Stafford, 2020):
1. Cheerful
2. Feminine
3. Friendly
4. Happy
5. Innocent
6. Playful
7. Wholesome

Perceived Competence (Fiske, 2018)
Please rate how well the following traits describe your colleague.
1 = not well at all; 7 = very well
7. Competent
8. Intelligent
9. Skilled
10. Efficient
11. Assertive
12. Confident

Perceived Trustworthiness (Ohanian, 1990)
Please place your colleague on the scales below based on your perception of them.
1-7

6. Undependable–Dependable
7. Dishonest–Honest
8. Unreliable–Reliable
9. Insincere–Sincere
10. Untrustworthy–Trustworthy

Perceived Riskiness (Ruggs & Hebl, 2022)
Please rate how well you believe the following traits describe your colleague.
1 = not well at all; 7 = very well

1. Risky
2. Edgy
3. Irresponsible
4. Dangerous

Perceived Artisticness (Ruggs & Hebl, 2022 with added items)
Please rate how well you believe the following traits describe your colleague.
1 = not well at all; 7 = very well

1. Artistic
2. Creative
3. Imaginative
4. Aesthetic
5. Innovative
6. Inventive
7. Original

Email Task (Scanlon, 2025)
(coded by trained RAs for subtle discrimination and interpersonal fairness)

"Imagine your colleague sent you the email below, please write an email responding to their email."

Good morning,

I was wondering if you would be able to help me with a project I am working on? It would require meeting a few times over the coming weeks and putting together some documents that will be presented at my next meeting with the client. I will also need help getting through some of the transcripts from the most recent round of interviews.

I realize you have a lot on your plate right now and that quarterly deadlines are approaching, but if you are able to provide assistance, it would be greatly helpful.

Please let me know at your earliest convenience so we can set up a time to meet if need be.

Thank you,

Reply below: _____
_____
_____

Now imagine that you are working with your colleague, please rate the following items to reflect how you would feel and behave while working with them.

Subtle Discrimination
Working with my colleague…
1 = *strongly disagree* to 5 = *strongly agree*

1. I discount anything they say to me.
2. I am not able to take them seriously.
3. I disregard directions from them.
4. I ignore their ideas.
5. I withdraw from work assigned to me by them.
6. I am not willing to take advice from them.
7. I avoid them at work.
8. I do not go out of my way to help them.

Interpersonal Fairness (items 1-4 from Colquitt, 2001; Colquitt & Rodell, 2015; items 5-9 from Moorman, 1991)
Working with my colleague…
1 = *strongly disagree* to 5 = *strongly agree*

1. I treat them in a polite manner.
2. I treat them with dignity.
3. I treat them with respect.
4. I refrain from making improper remarks/comments to them.
5. I consider their viewpoint.
6. I provide them with timely feedback about decisions and implications.
7. I treat them with kindness and consideration.
8. I show concern for their rights.
9. I deal with them in a truthful manner.

Incivility (Cortina et al., 2001)
Working with my colleague, I…
1 = *never* to 5 = *always*

1. Put down or am condescending to them.
2. Pay little attention to their statements or show little interest in their opinion.
3. Make demeaning or derogatory remarks about them.
4. Address them in unprofessional terms, either publicly or privately.
5. Ignore or exclude them from professional camaraderie.
6. Doubt their judgement on matters over which they have responsibility.
7. Make unwanted attempts to draw them into a discussion of personal matters.

Ostracism (Ferris et al., 2008)
Working with my colleague…
1 = *never* to 5 = *always*

1. I ignore them at work.
2. Others leave the area when they enter.
3. Their greetings go unanswered at work.
4. They involuntarily sit alone in a crowded lunchroom at work.
5. Others avoid them at work.
6. Others do not look at them at work.
7. Others at work would shut them out of the conversation.
8. Others refuse to talk to them at work.
9. Others at work would treat them as if they aren't there.
10. Others at work do not invite them or ask them if they want anything when they go out for a coffee break.

Inclusion/Exclusion Work Group Involvement (Mor-Barak & Cherin, 1998)
Within my work group…
1 = *strongly disagree* to 5 = *strongly agree*

1. My colleague feels part of informal discussion in the work group.
2. My colleague feels isolated from the work group. (R)
3. Work group members do not share information with my colleague. (R)
4. People in the work group do not listen to what my colleague says. (R)
5. My colleague's judgement is not respected by members of the work group. (R)
6. Work group members make my colleague feel a part of decisions.

Help seeking (Nadler et al., 2006)
1 = *never* to 10 = *a lot*

1. Please rate the extent to which you approach your colleague for help when you are having difficulty on a work assignment.

Colleague Demographics

Gender

1. How does your colleague self-identify in terms of gender?
    a. Woman
    b. Man
    c. They do not identify with the gender binary
    d. I prefer not to disclose information concerning their gender

Age

2. Please indicate your colleague's current age (in years).

Ethnicity

Please select your colleague's ethnicity:

- White
- South Asian (e.g., East Indian, Pakistani, Sri Lankan)
- Chinese
- Black
- Jewish
- Filipino
- Arab
- Latin American
- Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai)
- West Asian (e.g., Iranian, Afghan)
- Korean
- Japanese
- Indigenous
- Other group—specify
- I prefer not to say

Participant Demographics

Openness to Experience (Donnellan et al., 2006 Mini-IPIP)

Below are phrases describing people's behaviors. Please use the rating scale below to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future.

1 = very inaccurate, 2 = moderately inaccurate, 3 = neither inaccurate nor accurate, 4 = moderately accurate, 5 = very accurate

1. I have a vivid imagination.
2. I am not interested in abstract ideas. (R)
3. I have difficulty understanding abstract ideas. (R)
4. I do not have a good imagination. (R)

Gender

1. How do you self-identify in terms of gender?
    a. Woman
    b. Man
    c. I do not identify with the gender binary
    d. I prefer not to disclose information concerning my gender

Age

2. Please indicate your current age (in years).

Work experience

1. How many hours per week do you work?
2. How long have you worked with your colleague? (in years)
3. How many hours per week do you work with this colleague?
4. How closely do you work with this colleague?
5. How much do you like this colleague?
6. Do you interact with this colleague outside of work?

Tattoos

1. Do you have any tattoos?
    a. No
    b. Yes
2. How familiar are you with tattoos?
    a. Not at all
    b. Slightly
    c. Moderately
    d. Very
    e. Extremely

Ethnicity

Please select your ethnicity:

- White
- South Asian (e.g., East Indian, Pakistani, Sri Lankan)
- Chinese
- Black
- Jewish
- Filipino
- Arab
- Latin American
- Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai)
- West Asian (e.g., Iranian, Afghan)
- Korean
- Japanese
- Indigenous
- Other group—specify
- I prefer not to say

Socioeconomic Status

Think of this ladder as representing where people stand in the United States. At the **top** of the ladder are the people who are best off – those who have the most money, the most education, and the most respected jobs. At the **bottom** are the people who are worst off – who have the least money, least education, and the least respected jobs or no job. The higher you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom

Where would you place yourself on this ladder?

Please place a large **"X"** on the rung where you think you stand at this time in your life, relative to other people in the United States.

Appendix K: Study 3 Item Parcels Table for CFAs

Variable	Parcel	Items
Perceived Darkness of Tattoo Content	Parcel 1	Items 1-3
	Parcel 2	Items 4-5
	Parcel 3	Items 6-7
Perceived Lightness of Tattoo Content	Parcel 1	Items 1-3
	Parcel 2	Items 4-5
	Parcel 3	Items 6-7
Perceived Competence	Parcel 1	Items 1-2
	Parcel 2	Items 3-4
	Parcel 3	Items 5-6
Perceived Trustworthiness	Parcel 1	Items 1-3
	Parcel 2	Items 4-5
Perceived Artisticness	Parcel 1	Items 1-3
	Parcel 2	Items 4-5
	Parcel 3	Items 6-7
Perceived Riskiness	Parcel 1	Items 1-2
	Parcel 2	Items 3-4
Subtle Discrimination (self-report)	Parcel 1	Items 1-2
	Parcel 2	Items 3-4
	Parcel 3	Items 5-6
Subtle Discrimination (external-rating)	Parcel 1	Items 1-3 (rater 1)
	Parcel 2	Item 4 (rater 1) and item 1 (rater 2)
	Parcel 3	Items 2-4 (rater 2)
Incivility (self-report)	Parcel 1	Items 1-2
	Parcel 2	Items 3-4
	Parcel 3	Items 5-6
Ostracism (self-report)	Parcel 1	Items 1-3
	Parcel 2	Items 4-5
	Parcel 3	Items 6-8

Interpersonal Fairness (self-report)	Parcel 1	Items 1-3
	Parcel 2	Items 4-5
	Parcel 3	Items 6-8
Interpersonal Fairness (external-rating)	Parcel 1	Items 1-3 (rater 1)
	Parcel 2	Item 4 (rater 1) and item 1 (rater 2)
	Parcel 3	Items 2-4 (rater 2)
Inclusion (self-report)	Parcel 1	Items 1-2
	Parcel 2	Items 3-4
	Parcel 3	Items 5-6

Appendix L: Additional Study 3 Tables

Table L1
Means and Standard Deviations for Study 3 Participant Variables

Variables	***M***	***SD***
1. Participant gender	.49	.50
2. Participant age	38.77	10.79
3. Participant tattoo status	.35	.48
4. Participant tattoo familiarity	3.64	1.06
5. Openness to experience	4.15	.83
6. Years working with colleague	4.93	4.20
7. Hours per week working with colleague	24.81	13.76
8. Closely working with colleague	3.38	.94
9. Liking colleague	4.38	.87
10. Interacting with colleague outside work	2.44	1.22

Note. N = 274-277. Gender is dummy coded with men = 0 and women = 1. Participant tattoo status is dummy coded as no = 0 and yes = 1.

Table L2

Correlations for Study 3 Participant Variables

Variables (referring to participants)	1	2	3	4	5	6	7	8	9
1. Gender									
2. Age	-.02								
3. Tattoo status	.14*	-.06							
4. Tattoo familiarity	.11	.09	.38**						
5. Openness	-.07	-.02	.04	.24**					
6. Years working with colleague	.04	.42**	-.03	.06	-.10				
7. Hours per week working with colleague	.05	-.03	.14*	.16**	.03	.05			
8. Closely working with colleague	-.06	-.06	.09	.21**	.15*	-.01	.43**		
9. Liking colleague	-.01	.08	.15*	.18**	.14*	.09	.12	.32**	
10. Interacting with colleague outside work	-.06	-.10	-.01	.11	.09	.12	.14*	.33**	.37**

Note. N = 274-277. Gender is dummy coded with men = 0 and women = 1. Participant tattoo status is dummy coded as no = 0 and yes = 1.

Table L3

Correlations for Study 3 Variables and Participant Variables

Variables	Gender	Age	Tattoo Status	Tattoo Familiarity	Openness	Years with colleague	Hours with colleague	Close work with colleague	Liking colleague	Interacting with colleague outside work
1. Darkness	-.12	-.03	.04	.05	.05	.04	-.03	.04	-.06	.19**
2. Lightness	.14*	-.17**	.04	.06	.06	-.10	.16**	.31**	.28**	.25**
3. Coworker	.01	.001	-.03	.12	.02	.01	-.03	-.14*	-.01	.03
4. Follower	-.03	.13*	.03	-.08	-.02	.08	-.01	.09	.10	-.03
5. Supervisor	-.03	-.13*	.04	-.02	-.03	-.08	.05	.08	-.04	.04
6. Manager	.04	-.04	-.03	-.09	.02	-.05	.01	.05	-.08	-.04
7. Industry	-.03	.15*	-.004	-.09	-.27**	.13*	-.02	-.02	-.01	-.15*
8. Competence	.16**	.01	.17**	.25**	.17**	.05	.05	.25**	.48**	.30**
9. Trust	.05	.05	.15*	.20**	.14*	.04	.03	.27**	.67**	.24**
10. Artistic	.12	-.11	.12*	.30**	.29**	-.07	.11	.33**	.43**	.39**
11. Risky	-.08	.02	.01	-.04	-.04	-.03	-.05	-.11	-.39**	-.06
12. SD (SR)	.01	-.03	-.08	-.12*	-.23**	.01	.01	-.20**	-.63**	-.18**
13. SD (ER)	-.13*	.13*	-.13*	-.13*	-.13*	.04	-.07	-.10	-.25**	-.07
14. Incivility	-.04	-.12	-.04	-.13*	-.15*	.07	.04	-.07	-.33**	.12*
15. Ostracism	.05	-.01	-.02	-.09	-.20**	.13*	.04	-.13*	-.44**	-.01
16. IF (SR)	.01	.15*	.03	.16**	.22**	-.02	-.05	.16**	.43**	.08
17. IF (ER)	.15*	-.12	.14*	.18**	.23**	-.003	.003	.16**	.22**	.08
18. Inclusion	-.03	.09	.02	.12	.21**	-.05	-.06	.17**	.40**	.05
19. Help seek	.05	.08	.09	.19**	.01	-.01	.17**	.38**	.43**	.31**

Note. N = 274-277. Industry is dummy coded with creative = 0 and traditional = 1. Gender is dummy coded with men = 0 and women = 1. Participant tattoo status is dummy coded as no = 0 and yes = 1. SD = subtle discrimination. IF = interpersonal fairness. SR = self-reported. ER = externally rated. Help seek = help seeking.

Appendix M1: Hypotheses Summary Table

Hypotheses		Support for Hypothesis?
***Hypothesis 1*:** (Study 1)	There will be greater subtle discrimination towards workers with dark content tattoos than workers with (a) light content tattoos or (b) no tattoos.	Not supported
***Hypothesis 2*:** (Study 1)	Workers with dark content tattoos will be perceived more negatively (i.e., rated lower on perceived competence, trustworthiness, and artisticness, and higher on perceived riskiness) compared to workers with (a) light content tattoos or (b) no tattoos.	Partially supported • No support for 2a or 2b with perceptions of competence or trustworthiness. • Support for both 2a and 2b with perceived riskiness. • 2b with perceived artisticness was significant but in opposite direction so not supported.
***Hypothesis 3*:** (Study 1)	The effects dark tattoo content on subtle discrimination will be mediated by perceived (a) perceived competence, (b) trustworthiness, (c) artisticness, and (d) riskiness.	Partially supported: • 3a and 3b not supported. • 3c not supported – the indirect effect is significant, but in the opposite direction. • 3d supported.
***Hypothesis 4*:** (Study 1)	*Hypothesis 4*: There will be greater interpersonal fairness towards workers with light content tattoos than workers with (a) dark content tattoos or (b) no tattoos.	Not supported
***Hypothesis 5*:** (Study 1)	Workers with light content tattoos will be perceived more positively (i.e., rated higher on perceived competence, trustworthiness, and artisticness, and lower on riskiness) compared to workers with (a) dark content tattoos or (b) no tattoos.	Partially supported • No support for 5a or 5b with perceptions of competence or trustworthiness. • Support for 5b (but not 5a) with perceived artisticness. • Support for 5a (but not 5b) with perceived riskiness
***Hypothesis 6*:** (Study 1)	The effects of light tattoo content on interpersonal fairness will be mediated by perceived (a) competence, (b) trustworthiness, (c) artisticness, and (d) riskiness.	Not supported

Hypotheses		Support for Hypothesis?
***Hypothesis 7*:** (Study 2)	Workers perceived as risky compared to those perceived as artistic (H7a) or a good worker (H7b) will experience more subtle discrimination, incivility, and ostracism.	Partially supported: • 7a and 7b supported for self-report subtle discrimination, incivility, and ostracism. • 7a and 7b not supported for externally-rated subtle discrimination.
***Hypothesis 8*:** (Study 2)	Workers perceived as artistic compared to those perceived as a good worker will experience less subtle discrimination, incivility, and ostracism.	Not supported
***Hypothesis 9*:** (Study 2)	Workers perceived as risky compared to those perceived as artistic (H9a) or a good worker (H9b) will experience less interpersonal fairness, inclusion, and help seeking.	Partially supported: • 9a and 9b supported for self-report outcomes of interpersonal fairness, inclusion, and help seeking. • 9a and 9b not supported for externally-rated interpersonal fairness.
***Hypothesis 10*:** (Study 2)	Workers perceived as artistic compared to those perceived as **a** good worker will experience more interpersonal fairness, inclusion, and help seeking.	Not supported
Hypothesis 11: (Study 2)	Gender will moderate the effects of perceived riskiness such that women perceived as risky will be treated with more subtle discrimination, incivility, and ostracism, and less interpersonal fairness, inclusion, and help seeking compared to men perceived as risky.	Not supported
Hypothesis 12: (Study 3)	Perceived darkness of tattoo content will be negatively related to perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and positively related to perceptions of (d) riskiness.	Partially supported: • 12b is not supported. • 12a and 12c were significant, but in the opposite direction compared to the predicted direction. • 12d is supported.

Hypotheses		Support for Hypothesis?
Hypothesis 13: (Study 3)	Perceived darkness of tattoo content will be positively related to subtle discrimination, incivility, and ostracism through lower perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and higher perceptions of (d) riskiness.	Partially supported: • 13a and 13b are not supported. • 13c was significant but in the opposite direction compared to what was predicted. • 13d is supported.
Hypothesis 14: (Study 3)	Perceived lightness of tattoo content will be positively related to perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and negatively related to perceptions of (d) riskiness.	Supported
Hypothesis 15: (Study 3)	Perceived lightness of tattoo content will be positively related to interpersonal fairness, inclusion, help seeking through higher perceptions of (a) competence, (b) trustworthiness, (c) artisticness, and lower perceptions of (d) riskiness.	Partially supported: • 15a and 15c are supported. • 15b and 15d are partially supported: supported for all outcomes except externally-rated interpersonal fairness.

Appendix M2: Research Question Summary Table

Research Questions		**Findings**
RQ1: (Study 1)	Will hierarchical position moderate the indirect effects of tattoo content on (a) subtle discrimination and (b) interpersonal fairness?	Mixed: • 1a: Hierarchical position moderated the indirect effect of dark tattoo content on subtle discrimination through perceived artisticness, such that this indirect effect was significant when the tattooed worker was a coworker or supervisor, but not when the tattooed worker was a supervisor's supervisor. • 1b: Hierarchical position moderated the indirect effects of light tattoo content on interpersonal fairness through perceived trustworthiness, such that the indirect effects differed by level of the moderator; however, the indirect effect was not significant for any individual level of the moderator. • 1a and 1b: Hierarchical position did not moderate any of the other indirect effects.
RQ2: (Study 1)	Will gender moderate the indirect effects of tattoo content on (a) subtle discrimination and (b) interpersonal fairness?	Mixed: • 2a: Gender moderated the indirect effect of dark tattoo content on subtle discrimination through perceived competence, such that the slopes of the lines differed from each other, but the indirect effect was not significant for either gender. • 2a and 2b: Gender did not moderate any other indirect effects.
RQ3: (Study 2)	Will gender moderate the effects of perceived artisticness on subtle discrimination, incivility, ostracism, interpersonal fairness, inclusion, and help seeking?	No significant gender moderation

RQ4: (Study 3)	Will hierarchical position moderate the indirect relationships between (a) perceived darkness of tattoo content and negative treatment, and (b) perceived lightness of tattoo content and positive treatment, through stereotypes?	• No significant results for 5a. • 5b significant: Hierarchical position significantly moderated the indirect relationships between perceived lightness of tattoo content and self-reported interpersonal fairness, inclusion, and help seeking through perceived riskiness, such that these relationships were significant when the tattooed colleague was a coworker or employee/follower, but not when the tattooed colleague was a supervisor or manager. • 5b non-significant: no moderation of the indirect relationship between perceived lightness of tattoo content and externally-rated interpersonal fairness through perceived riskiness. And no moderation of the indirect relationships between perceived lightness of tattoo content and positive treatment through the other mediators, namely perceived competence, trustworthiness, and artisticness.
RQ5: (Study 3)	Will industry moderate the indirect relationships between (a) darkness of tattoo content and negative treatment, and (b) lightness of tattoo content and positive treatment, through stereotypes?	No significant industry moderation.

Appendix N1: Study 1 Ethics Approvals

Study 1: Pilot 1

Queen's University General Research Ethics Board (GREB)

RE: GREB Initial Ethics Approval

February 12, 2024

Ms. Grocutt
Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6040690
Study Title: "Tattoos at Work Pilot Study"
Co-Investigators/Supervisor: Dr. Julian I Barling
Review Type: Delegated
Date of Full Board Meeting: N/A
Date Ethics Approval Issued: February 12, 2024
Date of Expiry of Ethics Approval: February 08, 2025

Dear Ms. Grocutt

Thank you for submitting the above referenced study to The Queen's University General Research Ethics Board (GREB). GREB has reviewed the study and granted initial ethics approval for this study as of the date noted above.

Documents Approved:

Document Name	Comments	Version Date
Letter of Information/Consent Form (combined document)	Appendix B - LOI/CF (clean version)	2024/02/07
Survey	Appendix C1 - Survey Items (clean version)	2024/02/07
Recruitment Letter/Email/Notice/Poster	Appendix A - Recruitment Notice (clean version)	2024/02/07
Other document	Appendix C3 - Images of People for survey	2024/01/25
Other document	Appendix C2 - Tattoo images for survey	2024/01/25

No deviations from, or changes to, the protocol should be initiated without prior written approval from GREB, except when necessary to eliminate immediate hazard(s) to study participants.

On behalf of the GREB, I wish you success in your research.

Sincerely,

Jacob Brower
Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing,
Academic Co-Director (Business), Master of Digital Product Management
Smith School of Business
chair.greb@queensu.ca
Queen's University
Kingston, ON K7L 3N6

GREB operates in compliance with, and is constituted in accordance with, the requirements of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonisation Good Clinical Practice Consolidated Guideline (ICH GCP); Part C, Division 5 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 3 of the Medical Devices Regulations and the provisions of the Ontario Personal Health Information Protection Act (PHIPA 2004) and its applicable regulations. Federalwide Assurance Number: FWA#: 00004184, IRB#: IRB00003062. GREB members involved in the research project do not participate in the review, discussion, or decision.

Study 1: Pilot 2

Queen's University General Research Ethics Board (GREB)

RE: GREB Initial Ethics Approval

April 26, 2024

Ms. Grocutt
Smith School of Business\Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6041210
Study Title: "Tattoos at Work Pilot Study 2"
Supervisor: Dr. Julian I Barling
Review Type: Delegated
Date of Full Board Meeting: N/A
Date Ethics Approval Issued: April 25, 2024
Date of Expiry of Ethics Approval: April 25, 2025

Dear Ms. Grocutt

Thank you for submitting the above referenced study to The Queen's University General Research Ethics Board (GREB). GREB has reviewed the study and granted initial ethics approval for this study as of the date noted above.

Documents Approved:

Document Name	Comments	Version Date
Survey	Appendix C2 - Survey (clean version)	2024/04/18
Letter of Information/Consent Form (combined document)	Appendix B - LOI/CF (clean version)	2024/04/18
Recruitment Letter/Email/Notice/Poster	Appendix A - Recruitment Notice	2024/04/12

No deviations from, or changes to, the protocol should be initiated without prior written approval from GREB, except when necessary to eliminate immediate hazard(s) to study participants.

On behalf of the GREB, I wish you success in your research.

Sincerely,

Jacob Brower

Jacob Brower
Chair, General Research Ethics Board (GREB)

Associate Professor and Distinguished Faculty Fellow of Marketing,
Academic Co-Director (Business), Master of Digital Product Management
Smith School of Business
chair.greb@queensu.ca
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Main Study 1

Queen's University General Research Ethics Board (GREB)

RE: GREB Initial Ethics Approval

May 09, 2024

Ms. Grocutt
Smith School of Business\Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6041273
Study Title: "Tattoos at Work Main Study"
Supervisor: Dr. Julian Barling
Review Type: Delegated
Date of Full Board Meeting: N/A
Date Ethics Approval Issued: May 09, 2024
Date of Expiry of Ethics Approval: May 09, 2025

Dear Ms. Grocutt

Thank you for submitting the above referenced study to The Queen's University General Research Ethics Board (GREB). GREB has reviewed the study and granted initial ethics approval for this study as of the date noted above.

Documents Approved:

Document Name	Comments	Version Date
Letter of Information/Consent Form (combined document)	Appendix B - LOI/CF (clean version)	2024/05/08
Survey	Appendix C2 - Survey (clean version)	2024/05/08
Debriefing Form/Letter	Appendix D - Debrief (updated using GREB template)	2024/05/08
Other document	Appendix C1 - images to be included in survey	2024/04/23
Recruitment Letter/Email/Notice/Poster	Appendix A - recruitment notice	2024/04/23

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On behalf of the GREB, I wish you success in your research.

Sincerely,

Jacob Brower
Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing,
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Smith School of Business
chair.greb@queensu.ca
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Kingston, ON K7L 3N6

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Queen's University General Research Ethics Board (GREB)

RE: GREB Amendment Ethics Approval

June 11, 2024

Ms. Grocutt
Smith School of Business\Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6041273
Study Title: "Tattoos at Work Main Study"
Review Type: Delegated
Date of Full Board Meeting: N/A
Date Ethics Approval Issued: June 11, 2024
Date of Expiry of Ethics Approval: May 09, 2025

Dear Ms. Grocutt:

The Queen's University General Research Ethics Board (GREB) has reviewed the amendment to the study and granted approval as of the date noted above.

Documents Approved:

Document Name	Comments	Version Date
Recruitment Letter/Email/Notice/Poster	Appendix A - recruitment message (clean version)	2024/06/11

Please do not hesitate to contact us if you have any questions.
Sincerely,

Dr. Jacob Brower, PhD
Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing,
Master of Digital Product Management
Smith School of Business
Queen's University
chair.greb@queensu.ca

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regulations. Federalwide Assurance Number: FWA#: 00004184, IRB#: IRB00003062. GREB members involved in the research project do not participate in the review, discussion, or decision.

Appendix N2: Study 2 Ethics Approvals

Queen's University

Queen's University General Research Ethics Board (GREB)

RE: GREB Initial Ethics Approval

September 06, 2024

Ms. Grocutt
Smith School of Business\Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6042160
Study Title: "Predictors of Discrimination and Fairness at Work"
Supervisor: Dr. Julian I Barling
Review Type: Delegated
Date of Full Board Meeting: September 6, 2024
Date Ethics Approval Issued: September 06, 2024
Date of Expiry of Ethics Approval: September 06, 2025

Dear Ms. Grocutt

Thank you for submitting the above referenced study to The Queen's University General Research Ethics Board (GREB). GREB has reviewed the study and granted initial ethics approval for this study as of the date noted above.

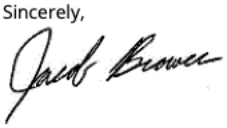
Documents Approved:

Document Name	Comments	Version Date
Letter of Information/Consent Form (combined document)	Appendix B2 - LOI/CF Part 2 (clean version)	2024/09/05
Letter of Information/Consent Form (combined document)	Appendix B1 - LOI/CF Part 1 (clean version)	2024/09/05
Survey	Appendix C3 - survey items Part 2	2024/08/30
Survey	Appendix C2 - survey items Part 1	2024/08/30
Other document	Appendix C1 - written vignettes	2024/08/30
Recruitment Letter/Email/Notice/Poster	Appendix A2 - recruitment message for Part 2	2024/08/30
Recruitment Letter/Email/Notice/Poster	Appendix A1 - recruitment message for Part 1	2024/08/30

No deviations from, or changes to, the protocol should be initiated without prior written approval from GREB, except when necessary to eliminate immediate hazard(s) to study participants.

On behalf of the GREB, I wish you success in your research.

Sincerely,



Jacob Brower
Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing,
Academic Co-Director (Business), Master of Digital Product Management
Smith School of Business
chair.greb@queensu.ca
Queen's University
Kingston, ON K7L 3N6

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Queen's University

Queen's University General Research Ethics Board (GREB)

RE: GREB Amendment Ethics Approval

October 24, 2024

Ms. Grocutt
Smith School of Business\Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6042160
Study Title: "Predictors of Discrimination and Fairness at Work"
Review Type: Delegated
Date of Full Board Meeting: N/A
Date Ethics Approval Issued: October 23, 2024
Date of Expiry of Ethics Approval: September 06, 2025

Dear Ms. Grocutt:

The Queen's University General Research Ethics Board (GREB) has reviewed the amendment to the study and granted approval as of the date noted above.

Documents Approved:

Document Name	Comments	Version Date
Survey	Appendix C3 - updated Part 2 survey (clean version)	2024/10/21
Other document	Appendix C1 - updated vignettes (clean version)	2024/10/21
Letter of Information/Consent Form (combined document)	Appendix B2 - updated Part 2 LOI/CF (clean version)	2024/10/21
Recruitment Letter/Email/Notice/Poster	Appendix A2 - updated recruitment material for Part 2 (clean version)	2024/10/21

Please do not hesitate to contact us if you have any questions.
Sincerely,

Jacob Brower

Dr. Jacob Brower, PhD
Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing,

Master of Digital Product Management
Smith School of Business
Queen's University
chair.greb@queensu.ca

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Queen's University

Queen's University General Research Ethics Board (GREB)

RE: GREB Amendment Ethics Approval

January 02, 2025

Ms. Grocutt
Smith School of Business\Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6042160
Study Title: "Predictors of Discrimination and Fairness at Work"
Review Type: Delegated
Date of Full Board Meeting: N/A
Date Ethics Approval Issued: December 22, 2024
Date of Expiry of Ethics Approval: September 06, 2025

Dear Ms. Grocutt:

The Queen's University General Research Ethics Board (GREB) has reviewed the amendment to the study and granted approval as of the date noted above.

Documents Approved:

Document Name	Comments	Version Date
Other document	Appendix C1 updated (clean version) - vignettes	2024/12/19
Letter of Information/Consent Form (combined document)	Appendix B1 updated (clean version) - LOI/CF	2024/12/19
Recruitment Letter/Email/Notice/Poster	Appendix A1 updated (clean version) - recruitment material	2024/12/19

Please do not hesitate to contact us if you have any questions.
Sincerely,

Jacob Brower

Dr. Jacob Brower, PhD
Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing,
Master of Digital Product Management
Smith School of Business

Queen's University
researchethics@queensu.ca

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Appendix N3: Study 3 Ethics Approvals

Queen's University General Research Ethics Board (GREB)

RE: GREB Initial Ethics Approval

February 13, 2025

Ms. Grocutt
Smith School of Business\Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6043279
Study Title: "Tattooed Colleague Survey"
Supervisor: Dr. Julian I Barling
Review Type: Delegated
Date of Full Board Meeting: N/A
Date Ethics Approval Issued: February 12, 2025
Date of Expiry of Ethics Approval: February 12, 2026

Dear Ms. Grocutt

Thank you for submitting the above referenced study to The Queen's University General Research Ethics Board (GREB). GREB has reviewed the study and granted initial ethics approval for this study as of the date noted above.

Documents Approved:

Document Name	Comments	Version Date
Letter of Information/Consent Form	Appendix B - LOI/CF (clean version)	2025/02/11
Debriefing Form/Letter	Appendix D3 - debrief	2025/01/22
Other document	Appendix D2 - End of survey message for careless responding	2025/01/22
Other document	Appendix D1 - end of survey message for ineligible	2025/01/22
Survey	Appendix C - Survey	2025/01/22
Recruitment Notice	Appendix A - recruitment notice	2025/01/22

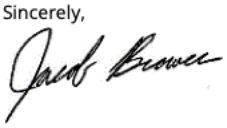
Documents Acknowledged:

Document Name	Comments	Version Date
Supervisor's letter/ e-mail	Supervisor Approval Email	2025/01/23
Other document	Budget	2025/01/22

No deviations from, or changes to, the protocol should be initiated without prior written approval from GREB, except when necessary to eliminate immediate hazard(s) to study participants.

On behalf of the GREB, I wish you success in your research.

Sincerely,



Jacob Brower
Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing,
Academic Co-Director (Business), Master of Digital Product Management
Smith School of Business
Queen's University
Kingston, ON K7L 3N6
researchethics@queensu.ca

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Queen's University General Research Ethics Board (GREB)

RE: GREB Amendment Ethics Approval

March 21, 2025

Ms. Grocutt
Smith School of Business\Smith School of Business\Unit REB Business
Queen's University

TRAQ #: 6043279
Study Title: "Tattooed Colleague Survey"
Review Type: Delegated
Date of Full Board Meeting: N/A
Date Ethics Approval Issued: March 21, 2025
Date of Expiry of Ethics Approval: February 12, 2026

Dear Ms. Grocutt:

The Queen's University General Research Ethics Board (GREB) has reviewed the amendment to the study and granted approval as of the date noted above.

Documents Approved:

Document Name	Comments	Version Date
Survey	Appendix C - survey (clean version)	2025/03/11

Please do not hesitate to contact us if you have any questions.
Sincerely,

Dr. Jacob Brower, PhD
Chair, General Research Ethics Board (GREB)
Associate Professor and Distinguished Faculty Fellow of Marketing,
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Queen's University
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