Common Scents?: Regulating the Use of Fragrances in Workplaces

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Abstract

Fragrances in consumer products have become a contested topic in daily life. Workplace fragrance policies problematize fragrances, which, for many people, are normal aspects of consumer products. This mixed-method dissertation focuses on employees in a large non-industrial workplace with a fragrance-free policy. It examines employee reactions to a policy that requests behavioral changes based on claims that everyday consumption of fragranced products may be harmful to employee health. In order to develop an understanding of how and to what extent fragrances and indoor air quality are problematized in the workplace, I engage a number of different constructs from environmental and consumer sociology. The dissertation expands upon constructs of contested illness (Brown, Kroll-Smith, & Gunter, 2000; Phillimore, Moffatt, Hudson, & Downey, 2000; Shriver & Webb, 2009); framings of environments in bodies (Kroll-Smith & Kelley, 2008); lay assessments of health impacts (Burton-Jeangros, 2011; Collins, 2010; Heikkinen, Patja, & Jallinoja, 2010; O'Sullivan & Stakelum, 2004; Scammell, Senier, Darrah-Okike, Brown, & Santos, 2009) and understandings of the role of scents in social life (Largey & Watson, 1972; Low, 2006; Synnott, 1991).

My findings show that a majority of participants understand fragrance impacts through an individual health frame, as an allergy, that locates the problems associated with fragrance within the bodies of specific individuals who exhibit symptoms due to fragrance exposures. While this orientation has had positive impacts on the implementation of the policy and reducing corresponding impacts on those who are Fragrance Sensitive, the degree to which fragrances have been problematized is limited by understandings of fragrance impacts as allergies. The limiting framework of fragrance sensitivity as allergy has practical efficacy because it helps employees to connect with the idea that fragrances cause health issues for some individuals. However, it also stymies assessments and connections to potential broader environmental health impacts of fragrances in part because allergens such as pollen are generally viewed as benign and only problematic to the anomalous individuals who experience reactions. Limitations of the framework are reinforced by established moral and cultural assessments of good and bad fragrances and the appropriate use of fragrances (Low, 2006; Synnott, 1991).

This dissertation examines what happens when people are confronted with information that the industrial traces associated with their consumption practices - in this case wearing and using fragranced products on their bodies and in their work environments - may be contributing to negative health outcomes for their coworkers. This study is the first to analyze the social dimensions of the use of synthetic fragrances in connection to environmental health impacts in the context of everyday life. The findings have relevance for other organizations considering regulation of fragrances as well as for efforts to use health rationales to encourage changes in consumption practices.

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Chapter 1: Introduction: Why Study Fragrances in the Workplace?

Fragrances in consumer products have become a contested topic in daily life. Workplace fragrance policies problematize fragrances, which, for many people, are normal aspects of consumer products. This mixed-method dissertation focuses on employees in a large non-industrial workplace with a fragrance-free policy. It examines employee reactions to a policy that requests behavioral changes based on claims that everyday consumption of fragranced products may be harmful to employee health. In order to develop an understanding of how and to what extent fragrances and indoor air quality are problematized in the workplace, I engage a number of different constructs from environmental and consumer sociology. The dissertation expands upon constructs of contested illness (Brown et al., 2000; Phillimore et al., 2000; Shriver & Webb, 2009); framings of environments in bodies (Kroll-Smith & Kelley, 2008); lay assessments of health impacts (Burton-Jeangros, 2011; Collins, 2010; Heikkinen et al., 2010; O'Sullivan & Stakelum, 2004; Scammell et al., 2009); and understandings of the role of scents in social life (Largey & Watson, 1972; Low, 2006; Synnott, 1991).

"Fragrance" refers to scents that are in the products that people use in their personal care and cleaning routines. Products include perfumes, colognes, hair care products, lotions, deodorants, powders, laundry detergents, fabric softeners, air fresheners, cleaning products, etc. This study is the first to examine the social dimensions of the use of synthetic fragrances in connection to environmental health impacts in the context of everyday life. Unlike many other contested chemicals, fragrances are designed to be perceived and constitute a functional and/or an aesthetically desirable attribute of a

product. Since fragrances are not only designed to be perceived by users but also influence consumers' preferences for given products, they offer a rich case for exploring interactions of consumers with information about previously obscured potential harms.

My findings show that a majority of participants understand fragrance impacts through an individual health frame, as an allergy, that locates the problems associated with fragrance within the bodies of specific individuals who exhibit symptoms due to fragrance exposures. While this orientation has had positive impacts on the implementation of the policy and reducing corresponding impacts on those who are Fragrance Sensitive, the degree to which fragrances have been problematized is limited by understandings of fragrance impacts as allergies. The limiting framework of fragrance sensitivity as allergy has practical efficacy because it helps employees to connect with the idea that fragrances cause health issues for some individuals. However, it also stymies assessments and connections to potential broader environmental health impacts of fragrances in part because allergens such as pollen are generally viewed as benign and only problematic to the anomalous individuals who experience reactions. Limitations of the framework are reinforced by established moral and cultural assessments of good and bad fragrances and appropriate fragrance behavior (Low, 2006; Synnott, 1991).

Through the use of consumer products in the practice of everyday life, people, who are usually unaware of the chemical composition of the products that they use and any hidden dangers therein, distribute industrial chemicals and pollution within their local environments. These industrial traces are side effects of everyday consumption that are deposited into the air, water, sediment, and even bodies. This dissertation examines what happens when people are confronted with information that the industrial traces associated

with their consumption practices - in this case wearing and using fragranced products on their bodies and in their work environments - may be contributing to negative health outcomes for their coworkers. In light of a health-based policy rationale, how do employees think about these industrial traces that they are emitting into the air through their use of fragranced products? What do they think of claims that fragrances are making some of their coworkers ill? The findings have relevance for other organizations considering regulation of fragrances as well as for efforts to use health rationales to encourage changes in consumption practices.

Why Fragrances?

During the second half of the 20th century, there was an explosion in the number, variety, and volume of industrial chemicals synthesized from petroleum and added to consumer products. Hundreds of these chemicals have been detected in humans (Centers for Disease Control and Prevention, 2017). There is a growing body of evidence that many of these chemicals accumulate in indoor environments and have detrimental impacts on environmental quality and human health including endocrine disruption, neurotoxic, and carcinogenic effects (Chey & Buchanan, 2008; De Coster & van Larebeke, 2012; Krimsky, 2000; Mitro et al., 2016; Vandenberg et al., 2012; Weschler, 2009). However, evidence of harm is usually amassed over a long period of time which means that impacts are often not confirmed until after the chemicals have been dispersed into the environment for many years and used as though they are safe (Brown & Cordner, 2011; Brown, 2012; Krimsky, 2000). While there are documented health impacts associated with synthetics that have been tested, thousands of industrial chemicals used in

consumer products remain untested and most likely under-regulated (Phillips, 2006; Szasz, 1994; Vogel & Roberts, 2011).

Widely used in everyday consumption, fragrances are a set of chemicals for which there is emerging knowledge of health impacts. Synthetic fragrances contain many different chemicals and are ubiquitous in consumer products ranging from soap to trash bags. In 2015, the value of "synthetic organic chemicals for use as flavor and perfume materials" produced by United States (U.S.) manufacturers was $3 billion (U.S. Census Bureau, 2016). In 2016, the global retail value of fine fragrances was $47 billion and the value of the laundry, deodorant, and air care markets, for which fragrances are often important attributes, was more than $100 billion (Euromonitor International, 2017). Across the world, tens of millions of pounds of fragrance materials are manufactured annually (Organisation for Economic Co-operation and Development, 2010; M2 Communications, 2016).

According to the research branch of the largely self-regulated industry, fragrances are designed from a pool of more than 5,000 materials, a majority of which are synthetic (Research Institute for Fragrance Materials, 2017). Synthetic fragrance molecules can be engineered to withstand a variety of product formulations, which means that synthetics make the wide range of fragranced consumer products possible (Fortineau, 2004; Rouhi, 1999). Technological innovations in fragrance chemistry over the past 20 years have increased the stability and length of release time for fragrances added to consumer products such as laundry detergents and personal care products (Fráter, Bajgrowicz, & Kraft, 1998; Fortineau 2004; Herrmann 2014). In the fragrance industry, there are ongoing research projects to further increase the duration of fragrance release and the

power of fragrances to stick to materials though highly sophisticated chemical engineering of fragrance delivery systems (Hosseinkhani, Callewaert, Vanbeveren, & Boon, 2015; Kuhnt, Herrmann, Benczédi, Foster, & Weder, 2015; McCoy, 2004; Schilling, Kaiser, Natsch, & Gautschi, 2010). These novel formulations can increase the intensity and duration of fragrance exposures, particularly in indoor spaces.

Fragrances have been shown to contribute to decreases in indoor air quality through the release of volatile organic compounds (VOC) and solvents (Uhde & Schulz, 2015). Despite the fact that indoor air is often significantly more polluted than outdoor air (U.S. Environmental Protection Agency (EPA), 1997), indoor air quality issues are often invisible (Jones, 1999). Recent research on indoor air quality and productivity at work found a negative correlation between the concentration of VOC in indoor environments and cognitive functioning of workers (Allen et al., 2016). Since at least the early 1990s, around the time of the emergence of the "sick building" concept, which raised consciousness about health impacts associated with poor indoor air quality in office buildings and other non-industrial settings (Murphy, 2006), U.S. government agencies have recommended that people reduce their use of synthetic fragrances in order to improve indoor air quality, especially in the homes and workplaces of people with asthma and other respiratory disorders (U.S. Environmental Protection Agency and U.S. Department of Health and Human Services, 1991).

Under the code of federal regulations, cosmetic companies can request trade secret protection when submitting fragrance ingredients to the Food and Drug Administration (FDA) which means that they do not have to report the composition of their fragrance mixtures on product ingredient disclosures (U.S. Government Printing

Office, 2013). The fragrance industry in the United States remains largely unregulated at the federal level (Steinemann, 2004; Steinemann, 2009), though there are several agencies that could regulate the chemical ingredients in fragrance depending on product categories including the FDA, the EPA, and the Consumer Product Safety Commission (Hutt, 1984; McNamara, 1984). One of the challenges of regulating fragrances is the "overlapping division of responsibilities" among agencies (Michaels, 2008).

There is an emerging body of evidence documenting negative human health impacts of exposures to fragranced chemicals. The most widely studied and accepted are adverse skin reactions such as contact dermatitis (Johansen, 2003; Mowad, 2006). Inhaling fragrances can trigger asthma, headaches, hay-fever like symptoms, neurological, and psychological effects (Elberling et al., 2005; Fisher, 1998; Perry, 2008; Söderholm, Söderberg, & Nordin, 2011), however the connection between these impacts and fragrance exposures is contested (U. S. EPA, n.d.). Some fragrance molecules and additives have endocrine disrupting effects (De Coster & van Larebeke, 2012; Dodson et al., 2012). Synthetic musks have been found in breast milk and researchers question what the long term impacts of such exposures might be (Yin et al., 2012). In the most recent survey of experiences with fragrances in the United States, Steinemann (2016) found that 35% of respondents reported negative health impacts such as headaches and breathing difficulties due to exposures to fragrances. This rate is similar to an earlier study which found that 30% of a nationally representative sample reported being irritated by exposure to fragrances (Caress & Steinemann, 2009).

In addition to impacts on human health, scientists have documented the persistence of synthetic fragrance chemicals in the broader environment (Daughton &

Ternes, 1999; Klaschka et al., 2013; Peck & Hornbuckle, 2006; Peck, Linebaugh, & Hornbuckle, 2006; Villa, Assi, Ippolito, Bonfanti, & Finizio, 2012). Fragrances contribute to ambient outdoor air pollution with concentrations highest in areas with higher population densities (Peck & Hornbuckle, 2006). Fragrance molecules have been shown to make it through wastewater/sewage treatment processes (Klaschka et al., 2013) and are among the most prevalent kinds of personal care product ingredients found in bodies of water (Montes-Grajales, Fennix-Agudelo, & Miranda-Castro, 2017). Peck and colleagues (2006) estimated that five synthetic musk fragrances had accumulated in the Great Lakes to levels of more than 4,000 pounds in Lake Erie sediment and more than 39,000 pounds in Lake Ontario sediment. Research on aquatic species show that synthetic musks, which are commonly used in fragrance mixtures, can reduce cellular defenses and therefore increase the accumulation of other toxic chemicals in organisms (Chen et al., 2015; Luckenbach & Epel, 2005). The bioavailability and toxicity of synthetic musks may increase in the presence of perflourinated chemicals, which are widespread persistent organic pollutants (Pablos, García-Hortigüela, & Fernández, 2015). Evidence of impacts has been mounting since industry researchers estimated that 92% of fragrance materials posed an acceptable environmental risk using "current regulatory paradigms" as benchmarks (Salvito, Vey, & Senna, 2004).

Why have workplaces emerged as a site for regulation of fragrance use?

Emerging knowledge of health hazards associated with fragrances along with a lack of regulations at the federal level have created a context for contests over fragrances to take place at the level of the workplace. The EPA does not have the authority to regulate indoor air quality or fragranced household products that may be contributing to poor indoor air quality. (U.S. EPA, n.d.) The FDA recommends an individualized approach to dealing with fragrance sensitivities. Citing a lack of legal authority to require allergen labeling on cosmetics, the FDA recommends those concerned about fragrance sensitivities "to choose products that are fragrance free, and check the ingredient list carefully. If consumers have questions, they may choose to contact the manufacturer directly." (U.S. FDA, 2015). This suggests that individuals have to be responsible for mitigating reactions to fragrance exposures.

In addition to health challenges, previous research documented how people with fragrance sensitivities have encountered resistance and ostracism in the workplace after asking colleagues to modify their fragrance practices (Lipson, 2004; Söderholm et al., 2011). In preliminary interviews for this dissertation with Fragrance Sensitive employees in workplaces without fragrance policies, participants described many negative experiences. Some examples include human resources departments and managers who demanded that employees not talk to their fellow coworkers about their fragrance issues, coworkers dismissing requests to stop using specific fragranced products, and resistance to removing air fresheners from restrooms. Some who received accommodations were physically separated from their colleagues or forced to work from home. Several left their jobs due to lack of accommodations. These experiences echoed findings of a recent

research study that found that coworkers' continued use of fragranced products made some Fragrance Sensitive employees so sick that they stopped working (Söderholm et al., 2011). A recent national survey found that 15% of respondents "have lost workdays or a job" due to exposures to fragranced products in the workplace (Steinemann, 2016).

In the absence of broader regulations, schools, hospitals, and workplaces across the United States have implemented fragrance restrictions to protect the health of employees with conditions such as asthma or environmental illness (EI). Some have adopted policies in response to legal action or under threat of legal action. For example, the City of Detroit adopted a voluntary fragrance policy after it lost a federal court case that explicitly interpreted fragrance sensitivity as something that could fall under the requirements for accommodations under the Americans with Disabilities Act (ADA) (Smith, 2010). According to one technical assistance provider, awareness of such court cases has increased the number of employers seeking help with implementing accommodations for employees with fragrance sensitivities (personal communication, July 2013). While employees with documented fragrance sensitivities may have access to protections, not all examples of fragrance sensitivity qualify for accommodations under ADA since accommodations depend on the nature of the reactions and whether the reactions meet the definition of disability under ADA (Simpson, 2013; Stoel Rives, 2012).

Anecdotal evidence from blog posts, news articles, and online advice columns suggests that fragrance policies are controversial, with some people exhibiting dismissive or derisive reactions to proposed policies banning fragrances in workplaces (Buckland, 2012; Kanner, 2012; Tillotson, 1999). However, Steinemann (2016) found that 53% of

U.S. participants would be in favor of a fragrance-free workplace policy compared to 20% who would not be in favor of such a policy. Within the past decade, legislators in at least three states, Massachusetts, Rhode Island, and New Hampshire, have introduced unsuccessful state-level legislation that would have banned fragrances, to various degrees, in public buildings and workplaces (Ode, 2007; Sanborn, 2012). In 2008, the Minnesota legislature required Minneapolis public schools to implement pilot scent-free policies (Minnesota Department of Public Health, 2008; Ode, 2007). In 2009, the U.S. Centers for Disease Control implemented a fragrance-free policy. Despite the emergence of workplace fragrance-free policies, I hypothesize that the use of fragrance remains a common-sense, generally un-problematized part of daily life for employees and challenges to the implementation of the fragrance policy will be on health and cultural grounds.

Theoretical Framing

This dissertation examines a contested illness debate through the lens of fragrance consumption. In an extensive analysis, Redclift (1996) demonstrated the important role of consumption in contributing to environmental degradation and inequality across the globe. To improve environmental outcomes, he called for a critical examination of the social values that underlie consumption and a subsequent reimaging of consumption practices to incorporate knowledge of the consequences of consumption activities into assessments of whether to engage in various practices (Redclift, 1996). Over the past decade, scholars have examined how successful shifts toward the adoption of more sustainable consumption practices are often part of broader lifestyle projects (Carfagna et

al., 2014; Gilg, Barr, & Ford, 2005; Schor, 2010). Recent work has shown that consumers can be agents of change on a number of environmental dimensions including mitigating climate change (Dietz, Gardner, Gilligan, Stern, & Vandenbergh, 2009) and inducing firms to reduce pollution in manufacturing processes (Popp, Hafner, & Johnstone, 2011).

The primary theoretical constructs that this dissertation contributes to are contested illness (Brown et al., 2000; Brown et al., 2001; Brown, 2007; Kroll-Smith & Floyd, 1997; Shriver & Waskul, 2006), understandings of industrial environments in bodies (Kroll-Smith & Kelley, 2008); individualization of illness experiences (Brown, 2007; Conrad & Barker, 2010), and lay assessments of potential threats to health (Burton-Jeangros, 2011; Collins, 2010; Heikkinen et al., 2010; O'Sullivan & Stakelum, 2004; Scammell et al., 2009). The analysis also incorporates denial (Auyero & Swistun, 2009; Norgaard, 2011; Opotow & Weiss, 2000) into understandings of how employees conceptualize their contributions to fragrance exposures and respond to fragrance requests. This section includes an overview of the sociological contributions of the research. More detailed literature reviews are included in each chapter.

Chapter 2 examines social and moral dimensions of fragrance use (Largey & Watson, 1972; Low, 2006; Synnott, 1991) that employees tap into when they hear about fragrance issues, specifically understandings of breaches of appropriate fragrance use and of the role of fragrances in meeting personal grooming and hygiene norms. Employees in offices are often required to meet certain standards of dress and hygiene for work (Murphy, 2006). Riach and Warren (2015) demonstrate that managing body odors is an important function of a "professional body". By examining the role of fragrances as well

as how breaches to appropriate fragrance practices are conceptualized by employees, the chapter contextualizes the role of fragranced products for managing the kinds of hygiene, odor, and appearance norms that are part of a workplace setting.

Fragrance sensitivity is a condition that is not officially defined by the biomedical establishment in the United States and is often contested. Chapter 3 analyzes conceptions of fragrance sensitivity from the perspectives of employees who identify as Fragrance Sensitive and those who do not. Research on contested illness has focused on disputes over illnesses from the perspectives of lay people versus experts (Brown et al., 2001; Shriver & Waskul, 2006). Polluters and others who are responsible for spreading contamination that laypeople associate with contested illnesses use scientific claims and assistance from the medical establishment to refute claims from injured groups (Brown et al., 2001; Shriver, White, & Kebede, 1998; Shriver, Webb, & Adams, 2002). In contrast, debates over claims of fragrance sensitivity in the workplace happen among lay colleagues. Conceptualizations of fragrance sensitivity shed light on how understandings of the potential health impacts of fragrances follow from hegemonic views on how bodies interact with the environment (Kroll-Smith & Kelley, 2008) and the dominant epidemiological paradigm (Brown, 2007).

Chapter 4 builds upon understandings of lay assessments (Burton-Jeangros, 2011; Collins, 2010; Heikkinen et al., 2010; O'Sullivan & Stakelum, 2004; Scammell et al., 2009) of the health impacts of fragrances and denial (Opotow & Weiss, 2000; Zerubavel, 2006). Many employees learned about fragrance sensitivity for the first time in the workplace. Employees are asked to make changes to their practices for the health of others. The chapter examines the kinds of evidence that employees use to evaluate claims

of fragrance sensitivity, how variations in scent perception affect the degree to which attention is focused (Zerubavel, 2006) on fragrance issues, and whether employees changes their practices as a result of their assessments of potential impacts of fragrance use on health.

Research Questions and Methods

A major basis for fragrance-free policies is that fragrances can be detrimental to indoor air quality and human health. To date, assessments of health impacts, and corresponding recommendations to change behaviors, have been relatively limited given the widespread use and production of fragrances. My work analyzes the social processes that underlie reactions and promote or hinder change when people are confronted with an environmental health challenge to commonly-accepted and widely-used chemicals in consumer products. The overarching research questions for the dissertation are: *How do participants think about the relationship between fragrances and the body?* and *On what bases do employees either comply with or contest fragrance-restrictive policies?*

This dissertation is a mixed-method study that incorporates both qualitative and quantitative techniques including interview, survey research, and case study methods. This section includes an overview of the study's data collection procedures and analytic techniques. The majority of data was collected during the winter of 2014 and fall of 2015 though a case study of a large non-industrial workplace that implemented a fragrance-free policy within the past five years. With more than 5,000 employees in a variety of departments and workplace roles, the organization implemented the policy in response to

impacts on employee health. The policy, which is voluntary in most departments, requests that employees do not wear perfume, cologne, or strongly scented products to work. Departments have implemented fragrance restrictions to varying degrees across the organization. Selecting a workplace with an existing fragrance-free policy ensures that interview participants have had some exposure to the idea that fragrances may have impacts on health. Smith's (1987) approach to everyday life as problematic informed my research methods. The study was approved by the Boston College Institutional Review Board.

In the preliminary phase of data collection for this project, I interviewed 29 people from outside the case study site between July 2013 and January 2014. Interview participants included technical assistance providers, government employees, human resource and managerial employees at organizations that have fragrance policies, and Fragrance Sensitive individuals. Of the non-case study site participants, 15 were individually interviewed and 14 were part of a focus group of people with fragrance sensitivities. Experiences of the Fragrance Sensitive individuals include those who have been accommodated in the workplace and those who were not. The interviews provided content and insights that informed refinement of the research design. Other background research included reviewing online blog posts, advice columns, and legal and human resources recommendations, which highlight some of the potential challenges and points of contention in disputes over fragrance restrictions in the workplace.

The approach to the case study is an embedded single-case design (Yin, 2009) which means that the site was divided into smaller units of analysis. In practice, this means that I gathered data from 40 non-managerial employees and 10 managers from

eight departments within the case study organization. Selecting multiple units within the case study site increases the depth of findings and the likelihood of developing a valid, reliable explanation of variations in approaches and reactions to different styles of implementation of the fragrance policy. In addition to the 50 employee interviews at the case study site, I also interviewed three people in managerial positions about the development of the fragrance policy and how it fits with other environmental initiatives at the organization. Table 1.1 includes a summary of the data collected for the dissertation.

Table 1.1: Summary of Data Collection

	Number	Source
Interviews	29	Participants from outside the case study site
	40	Non-managerial employees at the case study site
	10	Managerial employees at the case study site
	3	Policy interviews at the case study site
Surveys	1323	Case study site employees

The case study organization's fragrance policy requests that employees avoid wearing perfume, cologne, aftershave, scented body sprays, and strongly scented personal care products to work. With the exception of a few departments, the policy is technically voluntary which means that most employees have a choice as to whether they use fragranced products on workdays. Departments at the case study organization have varying degrees to which fragrance restrictions have been implemented and that variation was represented in the interview and survey samples. For example, a few departments have complete fragrance bans while others have more flexible arrangements. Fragrance

restrictions are more strictly applied in departments where there are employees with fragrance sensitivities who have asked to be accommodated than in departments without such employees. Two departments had policies that predated the organization's policy by more than a decade due to having employees with severe fragrance sensitivities in those departments. With support from the executive level, leaders in human resources designed the organization-wide policy.

The case study departments were selected by human resources, which fulfilled my request that at least two of the departments had stricter than average levels of implementation of the fragrance policy. To recruit participants for the study from the selected departments, I drafted an email and then sent it to a designated representative, selected by department management, within each department. Each point person then asked for volunteers within his/her respective department to participate in an interview. I requested, and the interview sample included, supervisory and non-supervisory employees who are in favor of and those who do not like the policy. Participants had a range of experiences with fragrance restrictions in the workplace, opinions about the policy, feelings about the role of scented products in their own personal care and hygiene practices, and interactions with Fragrance Sensitive people.

Interviews at the case study site provide insight into policy implementation, employee opinions regarding the policy, and whether employee practices have changed over time. Interviews were semi-structured and lasted between 26 and 94 minutes each, with an average duration of 57 minutes. The interviews took place at the case study site during work hours in private offices and conference rooms. At the beginning of each interview, the interview participant and I discussed the purpose of the overall study, the

informed consent process, and the participant's questions or concerns. During the interviews, participants were asked about how the policy was communicated and implemented in their departments as well as their experiences with and opinions about the fragrance policy. They were also asked about their fragrance product use, scent preferences and dislikes, and their experiences with fragrance sensitivity and Fragrance Sensitive individuals. Toward the end of each interview, participants were asked to respond to two prompts related to workplace fragrance debates: an individual rights argument used by opponents of fragrance restrictions and a "secondhand scents" argument used by advocates of such restrictions. The final group of questions related to participants' views and whether they had thought about potential impacts of fragrances on human health, indoor air quality, or broader environmental quality. Participants with supervisory responsibilities were also asked about their experiences managing employees' fragrance-related requests. Demographic information was collected at the conclusion of each interview.

I transcribed all interviews using InqScribe software and used MaxQDA software to manage and analyze the qualitative data. My approach to analyzing the interview data was an iterative multi-step process consisting of reading each interview, writing memos, reflecting on the interview content, and then doing line-by-line coding of each interview for specific themes. After transcribing the interviews, I read through the interview transcripts and noted general themes. I used those themes to generate the initial codes for the line-by-line coding process. Other codes emerged through the coding process. For such codes, I reviewed and recoded, where applicable, the transcripts that had been coded prior to the emergence of the new codes.

After coding the interviews, I extracted sections of text to identify selected themes. I then read all of the quotes for each theme and noted patterns within that data set. Throughout the process, I referred back to the interview transcripts to contextualize emerging patterns. I noted how departmental contexts, experiences with fragrance sensitivity, and orientations toward fragranced products informed participant experiences and opinions. I then wrote an analysis of the theme. One of the emerging themes that I wrote about was scent perception. I shared my preliminary analysis with and sought feedback from my dissertation advisor, who helped me to reorganize and refine the analysis. Findings from that analysis are included in chapters 2 and 4. The process was repeated for other findings in the dissertation.

In addition to extracting text associated with specific codes, I also pulled data using the lexical search function in MaxQDA. I used that function to further explore emerging patterns. For example, after analyzing the extracted coded interview data that related to participants' preferences for and dislikes of scented products, I noticed that there were some commonalities in the ways that participants talked about the scents that they disliked and the kinds of scents they viewed as inappropriate for the workplace. I extracted terms related to the strength, volume, and normative aspects of fragrances including variants of *cheap, expensive, heavy, strong, light, subtle, too much, offensive,* and *noticeable*. The terms were extracted along with their surrounding paragraphs to see how participants talked about negative experiences with fragrances. The analysis contributed to the findings for the moral framings of scented products chapter.

The findings in Chapter 3, the Fragrance Sensitive chapter, required a second round of coding and analyzing the case study interviews. For the Fragrance Sensitive

chapter, I read through all of the case study interviews and coded all mentions of and references to fragrance sensitivity as "fragrance sensitivity". Since the recode happened after I had already analyzed and drafted some of the preliminary dissertation findings, I was able to identify and code more subtle references to fragrance sensitivity than in the first pass of coding. After extracting all fragrance sensitivity coded sections, I generated a table for each participant indicating the following: whether the person identifies as being Fragrance Sensitive, any bothersome effects of fragrances in themselves, actions, if any, that they take to mitigate bothersome effects, descriptions of family or friends who are Fragrance Sensitive, and what they think of the idea of fragrance sensitivity as being something that deserves accommodations in the workplace. The tables were used to generate the fragrance sensitivity spectrum and the categories for whether participants think about fragrances as deserving workplace accommodations. More information about the process and analysis is included in Chapter 3.

The interview analysis informed the development of a survey for a broader sample of employees about attitudes toward fragrances in personal care and cleaning products as well as opinions about the policy. The survey was piloted with 12 employees at the organization in August 2015. Since the pilot phase went well, the survey was administered without changes to participants in the organization. I drafted an email letter describing the study, informing potential participants of the measures taken to protect their individual data, and highlighting in bold lettering that the survey was not being administered by the organization. A human resources department employee used a general organizational email account to send my letter and online survey link to each employee's work email account. Employees were invited to take the survey in

September and October 2015. Survey topics included: fragranced product use, opinions about the policy, agree/disagree scales for a number of positive and negative fragrance characteristics, and experience with fragrance sensitivity and Fragrance Sensitive people.

The completed survey response rate was 26% of the 5154 employees who were invited to take the survey. Only the 1,323 completed surveys were included in the data set and analysis. Data from the closed-response survey items were cleaned, coded, and analyzed using SPSS. I ran and reviewed descriptive analyses for the whole data set and by Fragrance Sensitive and Not Fragrance Sensitive categories. The main subgroup comparison is by the question of whether the participant identifies as having sensitivities to fragranced products. I used Excel to transform raw frequencies into charts and tables.

The demographics for the survey and interview samples are included in Table 1.2. Overall, a majority of participants in the study were female. At 74% compared with 60%, the proportion of females was higher among interview participants than among survey participants. With 32% and 17% participants of color, respectively, racial and ethnic diversity was higher in the interview sample than the survey sample. A higher proportion of interview participants were aged 50 or older than in the survey sample. Survey participants had a higher rate of completing at least a college degree than did interview participants. The rates of fragrance sensitivity were similar among interview and survey participants.

Table 1.2: Demographics of participants

	Interview (N=50)	Survey (N=1323)
Gender		
Female	74%	60%
Male	26%	38%
Other	-	2%
Race and Ethnicity		
Asian/Asian-American	2%	3%
Black/African-American	12%	4%
Hispanic or Latino/a	4%	2%
Native American	-	1%
White/European-American	62%	77%
Multiracial	14%	6%
Other	2%	1%
No response	4%	5%
Age		
Under 30	-	7%
30s	16%	25%
40s	26%	31%
50s	44%	27%
60s	14%	10%
Level of Education		
High School	6%	2%
Associate's Degree or Some College	42%	29%
Bachelor's Degree	30%	44%
Graduate Degree	22%	24%
Other	-	<1%
Fragrance Sensitivity		
Fragrance Sensitive	38%	34%
Not Fragrance Sensitive	62%	60%
Unsure	-	6%
No response	-	<1%

Throughout the dissertation, data is presented by Fragrance Sensitive status: Fragrance Sensitive and Not Fragrance Sensitive. For survey results, Fragrance Sensitive status was determined by participants' responses to the question of whether they "are sensitive to fragrances or scented products". For interview results, Fragrance Sensitive and Not Fragrance Sensitive are categorized according to the criteria described in Chapter 3. Table 1.3 includes demographics of the Fragrance Sensitive and Not Fragrance Sensitive categories. The numbers include both interview and survey participants while excluding those survey respondents who were unsure about their fragrance sensitive status or left the question blank. As shown in Table 1.3, there are higher proportions of female and white participants in the Fragrance Sensitive group compared with the Not Fragrance Sensitive group. The age and level of education distributions are similar for the two subgroups.

Table 1.3: Demographics of participants by Fragrance Sensitive status

	Not Fragrance Sensitive (N=822)	Fragrance Sensitive (N=472)
Gender		
Female	53%	75%
Male	45%	23%
Other	1%	1%
Race and Ethnicity		
Asian/Asian-American	4%	3%
Black/African-American	5%	3%
Hispanic or Latino/a	3%	1%
Native American	1%	1%
White/European-American	74%	81%
Multiracial	7%	6%
Other	1%	1%
No response	5%	4%
Age		
Under 30	9%	4%
30s	23%	27%
40s	33%	28%
50s	27%	29%
60s	9%	12%
Level of Education		
High School	3%	1%
Associate's Degree or Some College	31%	28%
Bachelor's Degree	43%	45%
Graduate Degree	23%	25%
Other	1%	0%

Overview of the Findings

Chapter 2 explores employee interpretations of appropriate and inappropriate scents for the workplace. The analysis is based on the following two questions: *How do employees distinguish between appropriate and inappropriate scents in the workplace?* and *How do employees interpret requests to change their fragrance practices in light of ideas about appropriate and inappropriate scents?* One challenge that arises in adhering to or resisting fragrance policies is that fragrances are normalized aspects of consumer products that employees use to enact hygiene, olfactory, and appearance norms for the workplace. The language that participants use to describe transgressions of fragrance use shows that they tap into common moral expectations for appropriate and inappropriate scent behaviors (Largey & Watson, 1972; Low, 2006; Synnott, 1991). A contribution of this chapter is the important role of fragranced products in meeting appearance norms which builds upon research that examined the role of scented products in the process of managing olfactory impressions (Low, 2006; Synnott, 1991). The prevalence of fragrances in consumer products designed for meeting appearance standards means that people are committed to the use of some products not necessarily for how they smell, but for the kinds of appearance norms that they allow people to meet.

With a health focus, Chapter 3 examines the following two questions: *How do participants interpret negative bodily reactions to fragrances or fragranced products?* and *To what extent has fragrance sensitivity become an accepted claim among employees?* Two of the main contributions of the chapter are the introduction of a fragrance sensitivity spectrum and the finding that many understand fragrance sensitivity

as an allergic response to normalized and ubiquitous fragrances. The fragrance sensitivity spectrum shows a range of experiences with negative bodily reactions to fragrances. In general, participants view fragrance reactions as allergies which individualizes the issue and conceptualizes it along frameworks of dominant views of how bodies interact with the environment (Kroll-Smith & Kelley, 2008) and the dominant epidemiological paradigm (Brown, 2007). While the individualized allergy framework has positive implications for building support for accommodations for those with fragrance sensitivities, it also limits the degree to which fragrances are problematized.

Chapter 4 is about the impacts of employee assessments of claims of fragrance sensitivity on orientations toward the policy. The chapter utilizes a framework of lay assessments (Burton-Jeangros, 2011; Collins, 2010; Heikkinen et al., 2010; O'Sullivan & Stakelum, 2004; Scammell et al., 2009) to examine the way that employees determine whether and the extent to which to change their fragrance practices. The two questions guiding the analysis are: *What are the mechanisms that impact lay assessments and corresponding actions related to fragrance restrictions in the workplace?* and *In what ways does the conceptualization of fragrance sensitivity as an individual health issue impact the implementation of the fragrance policy?* Flowing from an individualized interpretation of health impacts, the policy has contributed to a tangible decrease in the use of scented products, particularly in offices where there is a known Fragrance Sensitive employee. Interactions and prior relationships with coworkers with fragrance sensitivities provide data for assessments of fragrance requests and impact the degree to which people make changes to their practices. Employees who do not want to be inconvenienced or made uncomfortable by changing their products require a higher

burden of proof to do so. Processes of denial including inattention (Zerubavel, 2006) and "denial of self-involvement" and "outcome severity" (Opotow & Weiss, 2000) influence scent perceptions and the degree to which participants change their practices. Individualization of the health impacts of fragrance issues leaves room for them to become interpersonal disputes.

Conclusion

The case study organization is at the vanguard of a growing number of workplaces implementing fragrance policies. This dissertation contributes to understandings of how people think about and react to a policy that identifies their practices as potentially causing ill health effects for others. It contributes to general understandings of fragrance sensitivity by introducing a fragrance sensitivity spectrum that shows variations in the ways that people experience negative reactions to fragranced products. It also contributes an example of a contested illness case in which outcomes are based on lay assessments of health impacts and an absence of experts in the discourse. The organization's framing of fragrance impacts primarily as an individual health issue and corresponding understandings of fragrance impacts as a form of allergy provides an effective yet limiting framework for understandings of fragrance issues. Allergies, an established biomedical category, provide a convenient frame that helps people connect to the concept of fragrance sensitivity in a way that has led to substantive changes in the amount of fragranced products that employees wear to work. However, the framework also reinforces an orientation towards understanding fragrances as benign and normalized

aspects of everyday routines which limits the extent of changes to the use of fragranced products and prevents people from thinking about potential broader impacts of fragrances on health and the environment.

Chapter 2: Appropriate Scents in the Workplace: Moral Assessments and Interpretations of Fragrance Restrictions

> *I believe scented fragrances are only a problem to me if someone uses excessive amounts. I prefer scented fragrances over body odor. (Not Fragrance Sensitive)*
>
> *Fragrance, similar to body odor, can be an irritant. Heavy use of a fragrance regardless of the source can be problematic and should be brought to the attention of the person with an expectation of corrective action. If someone has poor hygiene, it is a similar issue requiring corrective action. (Not Fragrance Sensitive)*

Following scent norms is important for social life (Largey & Watson 1972; Synnott 1991; Low 2006). Fragrance policies call into question whether and the degree to which scents are appropriate in the workplace. The results in this chapter show that many participants view scents as normalized attributes of personal care and laundry products. When faced with fragrance restrictions, employees wonder how they, and their fellow coworkers, will meet appropriate olfactory and appearance standards without scented products. On a practical level they wonder: How will the policy affect their ability to properly groom themselves for work? How will it affect the air in the space? Will they be able to eliminate unwanted body odors? Will people, and therefore the air in the office, stink?

For many Not Fragrance Sensitive employees, the organization's fragrance policy was their first encounter with the idea that fragrances might be problematic for health and not just potentially unpleasant or bothersome in an aesthetic sense. In assessing fragrance restrictions, employees draw upon cultural values and moral evaluations connected to

normalized understandings of appropriate scents and scent practices for the presentation of self in public (Synnott 1991; Low 2006). Through an analysis of cultural and moral dimensions, the results in this chapter shed light on normative challenges to implementing fragrance restrictions while highlighting the role of scents in daily life and cultural reproduction. Others have examined the importance of scented products in the process of managing olfactory impressions (Synnott 1991; Low 2006). This chapter contributes to understandings of the importance of fragranced products in meeting olfactory and appearance norms while also expanding upon Low's (2006) concept of moral breaches.

Though the organization's policy was implemented primarily in response to health concerns, the results in this chapter show that many employees connect calls for scent restrictions to their own perceptions of obvious breaches of appropriate scent use that are based on normative (moral) assessments. Moral assessments of problematic scents show that participants engage a common language for characterizing obvious breaches of scent-based decorum. Framings of scent breaches as offensive, cheap, or too strong suggest that employees have shared notions about the kinds of fragrance and associated practices that deserve to be limited or regulated. On one level, moral assessments of obvious breaches of scent norms help employees connect to the idea that fragrances can be problematic. However, these assessments can also support disregard of fragrance restrictions when employees assess that their own practices are not morally problematic, and therefore, do not warrant change. Employee reactions to fragrance restrictions shed light on ways in which employees assess and define boundaries in terms of the strength, volume, and kinds of fragrances that are appropriate for the workplace.

Literature Review

Scents and odors are ascribed with social meanings and moral connotations that help to mediate social interactions (Largey & Watson 1972; Synnott, 1991; Low, 2006). These meanings, including which scents are desirable or undesirable, good or bad, are socially constructed, vary by culture, and help to distinguish between in-group and out-group (Largey & Watson 1972; Synnott 1991; Low 2006). For example, scents support assessments of class distinctions, both within ethnically homogenous and heterogeneous groups (Hankins, 2013; Largey & Watson, 1972; Synnott, 1991). Citing Maugham (1930), Largey and Watson (1972) point out that the emergence of the practice of morning baths in the early 20th century helped to make smell a marker of class distinction and stigmatization since those without access to the bath emitted stronger body odors. They argue that lower classes tended to overcompensate for the perception of smelling badly with a great deal of perfume, which led to another stigma of being over-scented with "cheap" perfume, with ""cheap" being used to imply lower class" (Largey & Watson 1972). In contrast, those in the middle and upper classes used expensive perfumes to highlight their status (Largey & Watson 1972).

Throughout the 20th century, an expanding consumer culture increased expectations of cleanliness, which reduced the acceptability of natural human scent emissions in social contexts (Classen & Howes 1994; Sivulka 2001; Ashenburg 2007). Classen & Howes (1994) contend that lifestyle changes and marketing campaigns in the era of consumer capitalism made body odor a concern across classes whereas in the past, it had only been the provenance of the wealthy. Citing the work of Marchand (1985),

Classen & Howes (1994) show how advertising campaigns in the early to mid-20th century helped to establish new fears about the role that body odors played in women or men either failing to attract a mate or obtaining a job, respectively. Ashenburg (2007) argues that "marketers and advertisers of soaps and deodorizers" ….drove hygienic standards upwards" in a society where smell replaced visual evidence as the "telltale sign" of dirtiness (p271). "Smelling someone's real body or allowing your own real body to be smelled has become an intrusion, a breach of a crucial boundary" (Ashenburg, 2007:271).

Deodorization and re-odorization practices, which involve removing naturally-occurring human odors and replacing them with scents from products, vary among different groups and serve as a way to distinguish between groups (Synnott, 1991; Largey & Watson, 1972). Synnott (1991) argued that such practices should be considered along with moral facets of language that equate "good as fragrant and evil as foul", which represents the "paramount power of olfaction in contemporary society" (p441). As such, he contends that "expenditures on colognes, perfumes, aftershave and other fragrances is not only an investment in the presentation of self, but is also a major component of the moral construction of the self" (Synnott, 1991: 441). If good and bad smells are associated with good and bad people, respectively (Synnott, 1991), then the moral values associated with deodorizing and re-odorizing contribute to and help to form, scent preferences of individuals. Synnott (1991) and Low (2006) both wrote about the importance of scented products in the practices of deodorization and re-odorization in terms of the "presentation of self".

For job candidates, emitting appropriate scents may be important for obtaining employment. Ameeriar (2012) found that to secure employment and otherwise fit into the public sphere, it may be necessary for immigrants and ethnic minorities to erase scent-based traces of ethnic differentiation in order to smell "neutral" like the dominant group. Fiore and Kim (1997) found that hiring managers make distinctions between appropriate and inappropriate perfumes worn by job interview candidates. Scents deemed to be "too strong" were generally rated to be unacceptable. There were also fragrance category qualities (spicy, etc.) associated with being inappropriate for the workplace. Just over 20% of their study participants said that interview candidates who wore too much fragrance had negatively affected hiring decisions (Fiore & Kim, 1997).

Workplaces often have dress codes which may also specify grooming and appearance standards. In an historical analysis, Murphy (2006) described the emergence of standards of hygiene and appearances that helped to distinguish relatively comfortable, sanitized, office work from that of factory work. Compliance with "middle-class standards of dress and comportment" became general expectations in the United States by the mid-20th century (Murphy, 2006: 43). The dominant ethos of the office atmosphere is one of middle class respectability "coded through dress, grooming, décor, and manners." (Murphy, 2006: 39). Managing body odors is an important function of a professional body (Riach & Warren, 2015). Riach and Warren's (2015) work shows how employees in an office environment understand office spaces as ideally neutral-smelling and that human odors should be eliminated and re-odorized "in culturally appropriate ways" (p797). Distinguishing between appropriate and inappropriate scents for the workplace

may have parallels with Classen's (1993) distinction between the dominant class as pleasant smelling or inodorate and the subordinate class as foul-smelling.

Existing social science literature on the moral dimensions of scents shows that, as markers of acceptable public behavior, scents are used to distinguish among groups. This chapter examines socially constructed ideas about appropriate scent boundaries in the workplace. Embedded in responses to the idea of restricting fragrance use are basic understandings, assumptions, and expectations for presenting oneself in the workplace. Implications of fragrance restrictions go beyond mere scent considerations and relate more generally to overall grooming standards due to the ubiquity of fragrances in personal care products. The analysis in this chapter focuses on the following two questions: *How do employees distinguish between appropriate and inappropriate scents in the workplace?* And, *How do employees interpret requests to change their fragrance practices in light of ideas about appropriate and inappropriate scents?*

This chapter examines the cultural and moral dimensions of assessments of appropriate scents in the workplace, primarily from the perspectives of participants who do not identify as Fragrance Sensitive. Fragrance Sensitive employees are only represented in this chapter to a limited degree. In general, participants connect the policy rationale with their own experiences and preferences for and against various scents, which are influenced by broader moral norms regarding appropriate scents in the workplace.

Findings

The findings are organized into three sections that explore the interactions between views regarding appropriate scent emissions for work and assessments of fragrance restrictions. The first section explores ways that participants engage moral framings of breaches of scent norms. Employees tap into existing cultural frameworks to talk about fragrances that are inappropriate for the workplace context. The second section examines the prevalence of scent breaches in the workplace. The third section addresses perceptions of challenges to meeting olfactory and appearance norms without the use of fragranced products. For some, fragrance restrictions bump up against the ability to realize olfactory and appearance norms. The results show how thinking about fragrance restrictions through a lens of moral breaches (Low 2006) helps to both support a connection to and an understanding of fragrance restrictions while also helping to support barriers to change.

Moral Assessments of Scent Breaches

Language shapes understandings of desirable and undesirable scents (Brant, 2008). Since the English language lacks words and phrases to describe scents in and of themselves, odors are described in reference to smelling like an object and metaphors created by those references help to shape understandings of scents (Brant 2008). Characterizations of inappropriate scents reflect moral assessments. This section includes examples of how participants described fragrances and scents that they do not like and which they view as inappropriate for the workplace. “Cheap”, “overbearing”, and “offensive” are common ways to express dislike of perfumes, scents, and fragrances. The terms also relate to the kinds of fragrances and fragrance practices that many participants

would agree warrant restrictions. The language that some participants used to describe their understandings of and experiences with fragrances connect to the moral dimensions of evaluating scents (e.g. Largey & Watson 1972; Synnott 1991; Low 2006). Moral evaluations of fragrance restrictions show that employees view some scents as deserving regulation. These kinds of assessments also might make some employees more resistant to modifying their use of scented products. Using the same lens that they use for bothersome fragrance, they may see such requests as reflections on their own personal tastes and may feel that managers or other employees who ask them to make changes are negatively judging their taste. It also makes it harder to see how scents that do not breach moral standards might be problematic in other ways.

Cheap Scents

The way that some participants talked about their own scent preferences included several value judgments such as using "cheap" as a term to describe the quality of fragrances that are unpleasant to them. While cheap or expensive prices were talked about as factors that influenced purchasing decisions for personal care and laundry products for some of the participants, "cheap" and "expensive" also have moral dimensions attached to them that describe the quality of the fragrance itself and perhaps the wearer of the scent (Largey & Watson, 1972). Some participants distanced their own scent practices from "cheap" by making it clear that they did not use cheap perfumes or colognes. For example, one male employee who enjoys wearing cologne and has not stopped wearing it to work despite the policy request, justified his use of cologne in part by noting that his cologne is not cheap or too strong.

When talking about their own fragrance preferences, a number of participants talked about cheap as a descriptor of quality for the fragrances that they do not like. A male employee who buys exclusive and expensive perfumes for his wife, misses smelling fragrances in the office and says that he would hate a world without fragrance. He does not like cheap perfume: “I think cheap perfume, I don't like, but expensive stuff is worth smelling.” For a female employee, the scents of cheap personal care products are as bothersome as body odor and secondhand smoke. She referenced one particular mass-marketed brand of perfume and fragranced products as being problematic: “that cheap, oh [brand], dare-I-say, products that are horribly stinky”. While there were no qualitative descriptions of what cheap smells like, several participants were clear to distinguish their own preferences and product choices from cheap.

While cheap scents might be bothersome, the perceived transgression of moral boundaries makes it awkward to confront a person wearing a cheap fragrance. There are implicit norms about wanting to avoid embarrassing a person by pointing out that s/he is breaching acceptable scent boundaries. Among the employees who described aversions to cheap perfume, a few also talked about not wanting to tell the wearers of the cheap fragrances that their scents are bad. For example, one female employee really loves perfumes and misses being able to wear them to work. When asked about her scent preferences, she emphatically expressed her disapproval of “cheap” perfumes by saying that: “It hurts my nose when I smell that cheap perfume or whatever”. Her aversion to cheap perfumes was so strong that she would sometimes pre-emptively use other scents to mask an impending encounter with the wearer of a cheap perfume. She wondered: “Can somebody tell her that her perfume is rotten?” She would rather that someone else

tells the person that her perfume is bad because she would feel awkward to do it herself. For this employee, cheap fragrances are problematic, but she would not want to hurt someone's feelings by telling the person to stop wearing the scent. Perhaps she also wants to avoid appearing judgmental about another person's preferences.

Framing bothersome fragrances as cheap contributes to a view that others are making accusations of cheap when they invoke the fragrance policy. In interpreting the fragrance policy, some employees project their ideas about cheap fragrances being bothersome or annoying onto requests to limit fragrances in the workplace. Those who have not associated fragrances with potential negative health impacts prior to the workplace policy might think that requests to change their scented products or the fragrances that they use are accusations of 'cheapness' against them.

Offending Scents

Another moral valuation associated with interpretations of requests to change product use is that of offending. Strong terms – such as "banish," a word associated with "the idea of treason" - are often used by marketers to frame the ways that their products eliminate unwanted or transgressive smells (Brandt, 2008). In describing fragrance infractions, participants used terms that underlie the moral dimensions of the relationships between scents and social interactions. One third of interviewees (17/50) used the term "offend" or its derivatives to either talk about their own experiences with fragrances or their understandings of others' experiences with fragrances. There were two main ways that participants talked about it: they described fragrances as having the power

to offend some people, including themselves occasionally, and they acknowledged the potential to be offended by requests to change their fragrance practices.

Some employees talked about people being offended by certain scents as a way to describe colleagues who have requested others to make changes in the workplace. These participants used "offend" as a term to describe how scents bother others. For example, one female participant described her understanding of the rationale for the policy as that some people are "allergic to" and "really offended" by smells. To make sure that she is not bothering others with the scented lotion that she uses while at work, she asks her coworkers if her hand lotion offends them. Another female employee stopped wearing perfumes to work after the fragrance-free policy was implemented. On reflecting on her former practice of wearing perfume to work, she said: "I felt like I hope I wasn't offending someone with my perfume. But you never know, you know, they may have just kept silent about it."

Several participants hoped that their own preferences were not offensive to others. One male participant who still wears cologne to work said that he would stop wearing it if it came to his attention that others were bothered by it: "I'd be fine personally with just not wearing it or wearing less of it. Because the intent is to, well, smell pleasurable and not offend people or give them migraines (Not Fragrance Sensitive)." For this employee, knowing that a scent offends, that it bothers someone, would be enough to make him change his practices. He said that if one is offending another person, one needs to accommodate that and resolve it – whether that means changing one's hair spray, cologne, or deodorant.

Another dimension that Not Fragrance Sensitive participants talked about was the potential to offend by asking someone to make changes to reduce personal scents. A male employee, the participant mentioned earlier who does not wear cheap cologne, said that he does not like to be around overbearing scents. He will try to get away from people wearing scents that are overbearing and if he does confront someone about wearing too much, he will try not to offend them. A female employee said that she is "not offended by" requests to change her use of scented products in order to spend time with family and friends who experience negative health reactions from fragrances. However, faced with a workplace complaint, she did not change her practices.

The few who mentioned the potential to be offended by requests to change their products highlight a possible emotional pitfall for employees – if one is offended by a request to change his or her products, then it may be a reflection that s/he feels judged for his/her practices. S/he may feel like requests to stop wearing a scent or using a given product are personal attacks on his/her tastes and habits. The ways the participants connected scents with the potential to offend offer insight into how employees are interpreting requests to make changes to their products. By explaining that they understand that fragrances can be offensive, they acknowledge that fragrances can be problematic for others. By saying that they are not offended by being asked to make changes to their products or that they do not want to offend others with their preferences, they show evidence of underlying moral judgments attached to their own practices.

Many of the people who used the term "offend" have changed one or more of their own personal care or laundry products to comply with the policy. The potential for

scents to offend, often viewed through employees' experiences of being bothered by unpleasant or strong scents, is a concept that helps Not Fragrance Sensitive employees to understand and perhaps connect more with requests made by their Fragrance Sensitive coworkers. For some, it can be frustrating or challenging to avoid offending others. For example, one female participant stopped wearing perfume to work and has changed almost all of her products. She shared an experience of being asked not to use a hand lotion at work that had a scent, but was from a brand that is marketed as being natural: "It was just hand cream. I thought that's gotta be the least offensive to anybody. Apparently it wasn't…. How do you know?" That is a question that many Not Fragrance Sensitive participants contend with in navigating the fragrance policy and deciding whether to change their scented products.

Strength and Volume of Fragrances

In addition to cheap or offensive scents, a number of participants have been bothered when others wear too much of a scent or too strong of a scent. Almost all - 95% - of survey participants agreed with the statement: "Fragrances can annoy people if the scents are too strong". Problems with the strength or volume of a scent might be inherent in the scent itself or a result of the manner in which it has been applied. The latter is another example of a moral judgment on practices because it implies that the person who wears too much fragrance is doing something wrong: that the person does not know the right way to apply fragrances or scents. As with cheap, and to some degree offensive, participants were clear to distance their own scent practices from those that are overbearing or too strong.

While the female participant quoted in the last section said that it can be difficult to figure out which scents are offensive to others, she mentioned that incorrectly applied perfumes or colognes can be problematic. Knowing how to apply fragrances is a learned practice:

> That's the last thing you put on: you spray, you walk through it, you go. …I was never a douser-on… I was taught to walk through it, that's how you do it, so it's subtle. It doesn't need to be [makes a throat gagging sound]. …So I, I definitely know… how to apply perfume. Some people don't. (Not Fragrance Sensitive)

According to this participant and others, it is obvious when someone does not know the correct/proper/right way to apply fragrances. A lack of "subtlety" to one's scent, which in some cases can be so unpleasant as to make a person want to gag, is indicative of a person being unaware or untrained in the right way to wear perfume.

For one male participant, who loves cologne, but does not wear it to work, the amount of fragrance that someone applies can be the difference between acceptable and unpleasant. He does not mind if a person wears a scent that smells bad, as long as s/he does not wear too much of it: "I'm not going to say I like all of them, if it's too strong, I'm like, argh, but, like I said, if it's just a - you know, real subtle amount, that doesn't bother me, even if it stinks" (Not Fragrance Sensitive). Saying that volume is the issue and not the scent itself implies that if people control the amount of scents that they use, they might not bother others with their fragrances.

The relative strength of scents is very subjective as highlighted by the way that two participants talked about the same brand of soap. One stopped using [Brand A] soap because she felt the scent was too fragrant: "I used to like [Brand A], and I don't even

know if they still make [Brand A], so, but it was pretty fragrant. It's like a fresh-smelling soap and I don't use that anymore because I thought it was too fragrant (Not Fragrance Sensitive). ” In contrast, another said that he uses “just a regular deodorant, just use regular shampoo, regular soap” in his personal care routine and that [Brand A] is one of those “regular” options. He said: “I like [Brand A], or [Brand B] because they're cheap and I mean, they seem to get me clean enough” (Not Fragrance Sensitive). The [Brand A] example highlights the subjectivity of the concepts of too strong or too fragrant in reference to scents because one person said that it was just regular soap and one said that it was too strong.

Subjectivity in judging the relative strength of scents was also clear from a comparison of participant responses and my observations about discernable scents emanating from participants. One of the interviewees from whom I smelled the strongest scents of personal care and laundry products talked about being careful about selecting the fabric softener for her clothes. She likes vanilla or floral scents and tries “to find the fragrance that is not extremely intense “. Her rationale is as follows: “I don't like intense fragrances: I don't like somebody blasting me with it. I don't want to do it to someone else” (Not Fragrance Sensitive). She also tries to avoid “overwhelming” scents from other products that she uses such as her shampoo.

Employees made connections between their dislike for certain scents or the volume of such scents and the sensitivities that others have to scents in the workplace. They also talked about how they preferred light, subtle scents and some wondered how those scents can be offensive or problematic. Many talked about their own product use in

these terms – for example, that they use products with light or mild scents that dissipate soon after they apply them. They expressed that it is okay for their coworkers to use light scents – since light scents are generally acceptable and appropriate and because the policy itself restricts fragrances that are "strongly" scented. Not Fragrance Sensitive employees interpret the fragrance policy with their own preferences and moral judgments associated with scents that they dislike. Many talked about the process of applying fragrances as being problematic – that it is the manner in which employees wear scents that make them problematic for others. Moral dimensions such as interpretations of cheap, offensive, and not knowing how to apply scents/applying them too strongly impact understandings of the policy and show judgments of the practices of wearing fragrances and scented products.

Prevalence of Moral Breaches

Low (2006) contends that unpleasant body odors are culturally subjective and are symbolically interpreted as "moral breaches". Survey data shed light on the frequency with which participants may be experiencing breaches of appropriate scent norms in the workplace. Tables 2.1 and 2.2 show the proportion of survey participants who said that at least one day per week, on average, they enjoy or do not like the scented products used by their coworkers. These numbers are reflections on how much employees notice scents from their coworkers. Just over half of participants without fragrance sensitivities said that they enjoy the scent of coworkers' fragranced products one or more days per week and one-fifth said that they do not like the scent of fragranced products used by

coworkers one or more days per week. The 56% figure shows that just over half of Not Fragrance Sensitive employees regularly notice coworkers' scents and they find those scents to be pleasant. In contrast, two-thirds of Fragrance Sensitive participants said that they do not like the scented products used by their coworkers at least once per week, on average.

Table 2.1: Experiences of coworkers' scented products 1

On average, one or more days per week, participants who…	Not Fragrance Sensitive	Fragrance Sensitive	All
Enjoy the scent of a fragranced product used by a coworker	56%	28%	46%
Do not like the scent of a fragranced product used by a coworker	20%	66%	37%

Table 2.2: Experiences of coworkers' scented products 2

	Not Fragrance Sensitive	Fragrance Sensitive	Total
Neither enjoyed nor did not like	39%	26%	34%
Did not like - Only	6%	46%	21%
Enjoyed - Only	42%	9%	29%
Enjoyed and Did not like	14%	19%	16%
Total	100%	100%	100%

Table 2.2 Combines the like and dislike scented products questions

An analysis of the combination of the two questions shows that 34% of survey participants – 39% of Not Fragrance Sensitive and 26% of Fragrance Sensitive – neither enjoy nor dislike coworkers scented products on a regular basis. A third of all survey respondents do not notice scented products used by their coworkers on a regular basis. Perhaps this is a reflection that their coworkers are "inodorate" (Classen, 1993) and thus

fit into expectations for appropriate scents. For those that have noticed scents, Fragrance Sensitive and Not Fragrance Sensitive respondents had opposite results for the "did not like only" and "enjoyed only" categories. Of Not Fragrance Sensitive participants, more than 40% enjoy coworkers' scented products on a regular basis while less than 10% dislike coworkers' scented products on a regular basis. The opposite proportions apply for Fragrance Sensitive participants.

Interview and open-ended survey responses show that employees notice other aromas emitted by or originating from their coworkers that are problematic breaches of perceived moral boundaries yet are not addressed by the fragrance policy. Moral language was also used to convey disapproval for other breaches in appropriate scent behaviors in the office such as body, smoking, food, or restroom odors, which for some are more conspicuous than the smell of fragranced products. For many, the smell of residual cigarette smoke emanating from coworkers is more noticeable and "offensive" than the smell of fragranced products.

> I think the fragrance policy is really one sided. I would much rather have a person come to the workplace smelling nice with light cologne or perfume then the individuals whose personal hygiene is lacking. I have had co-workers talked to about perfume but the smoker who comes in from a smoke break is okay. This is VERY frustrating. Body Odor is one of the worst smells and causes some people to have physical reactions. But, this is never discussed. Why? (Not Fragrance Sensitive)

Body odor was not mentioned as a problem in the interview responses, even though every participant was asked if it is a problem among his/her coworkers. There was not a specific body odor question on the survey, but the survey did include an open-ended

question for participants to write in any other concerns about workplace odors. Approximately 10% of survey respondents wrote about body odor. Some wrote that body odor is more pronounced in offices since the policy was put in place. Others say that there is not much of a change. Overall, it does not sound like an increase in body odors is a widespread issue in the organization, but there is a fear that fragrance restrictions will lead to an increase.

The first two findings sections included an analysis of some of the moral dimensions associated with interpreting the fragrance policy and awareness of the moral boundaries of fragrance behaviors. In particular, many employees interpret negative experiences with scents from moral standpoints that are tied to their own fragrance preferences as well as general understandings about breaches of decorum or norms in terms of fragrance practices. The third section analyzes assessments of how employees interpret the policy in relation to their own practices and scent emissions at work. Two kinds of interpretations are explored: the first section explores interpretation of the policy from the lens of participants who view perfume, cologne, and other fragranced products as essential and normal parts of their daily personal care routines. The second lens is the role of scented products in helping employees to achieve desired olfactory outcomes – related to ridding themselves of body odor – as well as to enact desired standards of appearance.

Fragranced Products are Normalized/Naturalized in Personal Grooming and Hygiene Routines

Scenting for itself: Fragrances and identity

For some employees, applying perfume or cologne is a normalized part of getting dressed for work or leaving the house. Powerful determinants in associating positive or negative attributes to scents are the feelings that are evoked by perceiving a scent (Synnott, 1991; Waskul, Vannini, & Wilson, 2009). According to Waskul and colleagues (2009), "the perception of the odor is the ritual feeling that is evoked" (p13). Emotional connections to scents and expectations for how one's body should smell influence the processes of employee assessments of scent restrictions and subsequent resistance to and compliance with fragrance-free requests. Some view the application of cologne or perfume as a necessary last step in grooming routines. They feel more secure in scenting themselves before work.

Several middle-aged participants talked about a long history of using fragrances that started in childhood. For those participants, using perfume on a daily basis was, and in some cases continues to be, just part of the habit of getting dressed. For the female participants with this orientation, wearing perfume is associated with expressing femininity. For example, one employee loves perfume and misses being able to wear it to work. She recalled fondly that she started wearing perfume as a young girl as part of learning to become a "lady". Another employee, whose mother gave her a bottle of "quality" perfume when she was 10 or 11 years old, talked about perfume as part of her identity.

> Depending how you were raised, you weren't properly dressed until you did a fragrance. And I and a couple of friends have talked about that. We were raised that way. You did everything and then you put your fragrance on and then you left - didn't bathe in it - you used that because that was what you did if you were dressed up to go someplace or dressed up to go out nicely and I've done it for years. My mother bought me Chanel #5 when I was probably 10 or 11 years old, you know, this is something nice to do - a quality fragrance and that sort of thing. So it's in your DNA. (Not Fragrance Sensitive)

Demonstrating that she knows how to wear perfume the right way, she notes that she does not bathe in it. The daily perfume ritual is not only part of her experience, but also understood by her peers to be appropriate behavior.

The men who still wear cologne to work did not talk about wearing cologne in terms of masculinity or in terms of their connections to childhood memories and expectations in the same way that women did. Perhaps part of that is that the women who reflected on their relationships with perfume and its place in terms of their identities have made changes to their perfume wearing habits for the workplace while the men have not. Several men talked about wearing cologne to work as a comfort. For example, one male employee still wears cologne to work and has not had to change that practice since the policy went into place.

> I don't put on a bunch of cologne, but I put on a couple of spritzes each morning. It's just a habit, I think for me, but I do, I mean, for my comfort. But I don't think it bothers anybody else. I mean, I don't put a lot on. (Not Fragrance Sensitive)

Lacking any challenge to his daily habit of wearing cologne to work, his assessment of wearing cologne is that it must be okay because no one has complained and he does not wear a lot of it. It is a habit and it makes him comfortable to continue to follow his normal practices.

Comfort may mean protection against potentially breaching body odor norms, as described by another male participant:

> It makes you feel more self-conscious and embarrassed at times in an office environment not having a cologne to wear, mainly when you're sweating and applied deodorant is not enough to cover the smell. (Not Fragrance Sensitive)

For the above participant, not using cologne increases the likelihood that one might contribute the inappropriate scent of body odor to the office environment.

Body care products such as scented lotions and laundry products purchased mainly for their scents function in the same way that perfumes or colognes do for some of the participants. For one female participant, who never wore perfume to work, scented lotions were a regular part of her daily grooming habits.

> I would never put perfume on, but I always wore- ALWAYS wear lotion - leaving without lotion is like not getting dressed for me, so I had to unwillingly change. I mean, people would notice and some people were like 'oh, thank god, you smell good' and some people were like [very straight-forward, quick] 'you smell good' and I'm like 'no, I don't'…. But no one complained, there was never a complaint, it was just noticeable. (Not Fragrance Sensitive)

The interpretation of the fragrance policy is that it is an affront to her habits and identity. Since no one complained, she interpreted the scents as being acceptable. Participants in this section view the policy as an imposition due to the strong connections that participants made between their identities and products that are used primarily for their scents. For them, normal, everyday grooming includes applying scented products. They talked about not feeling appropriately attired without scented products.

Scented as a side effect: Importance of functional attributes and lack of unscented alternatives

Synnott (1991) and Low (2006) both wrote about the importance of scented products in the practices of deodorization and re-odorization in terms of the "presentation of self". Low (2006) found among his study participants that, in the selection of products for personal care routines, "an imperative of smelling nice and luxurious" trumped hygiene considerations. That may have been the case for people who connect scents with their identity, but for more participants, a bigger challenge is that they wonder how to eliminate body odor and meet appearance norms without the use of what they view to be ubiquitous scented products. They wonder if they can meet functional needs, including appearance and scent-based outcomes, with unscented products. They worry about smelling bad and breaching moral boundaries if they do not use widely accepted, normalized products such as scented deodorants. In terms of appearances, they wonder how restrictions on scented products will affect their ability to effectively groom themselves to meet workplace appearance norms.

Fragrance as normalized aspect of personal care products: Everything is scented

A number of participants said it is difficult to find unscented alternatives to their products because even unscented products have some kind of scent. A majority of the participants who mentioned this challenge were in departments that have stronger interpretations of the fragrance-free policy, so they have at least tried to switch one or more products and have encountered this issue. Some participants viewed it as a real barrier to switching to unscented products and wondered: How do you find products or know what to choose if everything is scented? Since everything has a scent, where do you

draw the line? How does one know which products will be acceptable in the workplace? How does one discern which will be better for coworkers who are dealing with fragrance issues?

One challenge is that even unscented products still have scents as demonstrated in the following quote from a supervisor who addressed the issue of employees using scented hand lotions by purchasing an unscented hand lotion to share with his/her department.

> … [I]t does have a scent to it, and it says it's unscented. So, and it's not a good scent, so, yeah, I don't know what they've done to make it unscented, but it's not good, so, but I leave it there cause people always want - here, it gets dry, and we have all this paper and everything so people's hands do get dry and they want to use something. Well, people were bringing in those little hand lotions that you can get everywhere for a couple of bucks, and a lot of them were scented and people were complaining, so I bought some unscented lotion and put it on my desk and it's not - it still has a scent, but nobody's complained about it. It says unscented, maybe that's enough. I don't know. (Not Fragrance Sensitive).

For that supervisor, and for others, if unscented products not only have a scent, but they also have a scent that is unappealing or unpleasant, then how are they making a difference for Fragrance Sensitive employees? Is it worth making a change, particularly if the new product is less pleasant for the person using the products?

For some participants, there was confusion as to whether the products they use have a scent or fragrance, which creates a challenge for assessing whether they need to modify their use of such products. This might be a triumph of Jellinek's (1975) recommendation that marketers encourage people to believe that the scent of a product is intrinsic to the functioning of product. For a number of participants, there was confusion

regarding whether a product was scented if they use the original scent of the product. For example, when one participant was asked whether she uses the unscented, sensitive skin version or the regular, original version of a brand of soap, she replied "unscented, the original stuff, the white- yeah, it's usually white." The original version of that brand of bar soap is scented, but people may not think of it as scented when there are other special scented versions of the product available like cucumber-melon. Complicating this example is that all versions of that particular brand of soap are scented because the unscented version contains a masking fragrance.

Several participants did not think of their original scented laundry detergent as being scented. For example, one participant said that she does not "like using fragrances in the laundry" so when asked whether she uses an unscented version of her favorite brand, she replied:

> That's just my personal preference to do it. And I was [at the store] last time and I was looking for something and they had five, six different [scents]. They had all this - just give me the original stuff, to me that smells fresh and clean. I don't need wintergreen or something like that, which sometimes to me, those things their fragrance, they smell rather like alcohol, chemically. They don't smell like what greens really are. (Not Fragrance Sensitive)

She does not think of the original version of her laundry brand as having a fragrance, though it does contain fragrance, because it is taken-for-granted as the scent of that laundry detergent. As in the cases of soap and laundry included above, when a product includes a variety of scented versions, people do not necessarily think of the original version as being scented.

Meeting functional needs without scented products

A major barrier to considering a switch to unscented or fragrance-free products is the perception, tested to some degree by participants, of the lack of availability for comparable unscented products to meet desired aesthetic and olfactory outcomes. Resistance to changing personal care products was more often due to functional aspects of scented products than to preferences for specific scents. Some of the participants who have not changed their products have the perception that unscented alternatives are either not available or do not perform as well in established routines. Hair products, antiperspirants/deodorants, and hand/body lotions were the three most-often mentioned types of personal care products that fell into this category.

Scented hair products have posed some of the biggest challenges to adhering to the fragrance-free policy for some participants. In response to requests for them to stop using certain scented hair products, several participants responded that they need particular products suited to hair types such as color-treated, short, or curly to help them meet appearance norms and those products are not available in unscented versions. Several participants noted that they needed to use scented products to control their curly hair. For example, one employee, who has been asked to change her hair products, has tried a number of less-scented alternatives:

> So, everything pretty much has a scent to it. Can you really go out there and find something that really doesn't have a scent to it? Honestly, that's what I want to know, like my hair's - for curly hair, you're not going to find anything without a scent. And the product that I use, there's like really no smell to it anyway (Not Fragrance Sensitive).

That participant was not the only person who discussed the challenge of finding unscented hair products for curly hair after managers requested that she make a change. Another said that she needs a lot of hair products to keep her curly hair in control.

> I have curly hair and I have to wear a lot of hair product or I look huge. You know what I mean? …The times that I had gotten talked to about my hair product, I was just like, most hair products are scented, I can't do a lot about that. If you can offer me a hair product that does the same thing for my hair, that is non-scented, feel free. You know what I mean? (Not Fragrance Sensitive)

She was asked to make changes because there was a Fragrance Sensitive coworker in her office but she resisted because she worried that it would be too expensive and too much of a hassle to try to find products that would not make her hair look "huge". She feels that she needs to use such products in order to achieve appropriate aesthetic standards for her hair.

Participants also do not want to breach body odor norms. They worry that by not using scented products, they, and their coworkers, will smell bad, which would be unpleasant and unacceptable in a work environment. They want to be somewhere in a respectable or normal range in terms of how much others can smell them in the office.

> I think it's absurd that we now have to be subjected to the horrible odors of other peoples' poor hygiene because they can no longer use scented products in the workplace. Human beings are by nature generally smelly creatures, yet we have been able to avoid offending others for CENTURIES by using scented products. Now because a negligible number people have become so offended and bothered by every little thing imaginable, the rest/majority of us must suffer the stenches of body odor and funky laundry. In my experience, these "fragrance free" products are insufficient to mask the odors of hard working/sweating individuals. (Not Fragrance Sensitive)

Another product category that some have had to change and others have refused to change is deodorant/antiperspirant. One participant articulated the view, shared explicitly or implicitly by almost all participants, that using deodorant is a daily necessity: "well deodorant has a smell to it…unless you just don't wear any and then you smell like BO [body odor]". As in the case of hair products, participants felt the need to use deodorants that are effective in preventing body odor emissions at work.

> I think that employees should be able to wear scented deodorants as long as they are not too strong. I continue to wear a mild scented deodorant and have never had anybody notice, in fact once dressed, I don't even notice it. My reasoning is that most of the unscented natural deodorants do not do a sufficient job of preventing body odor and I find that body odor is much more unpleasant to smell than a mild fragranced deodorant. (Not Fragrance Sensitive)

Whether they stick to the same brand of deodorant or rotate among brands to maintain efficacy, many employees articulated that they want access to scented versions. The perception that unscented deodorant is not as effective in masking natural bodily odors was a reason for some participants to assess that they do not need to change their products.

Discussion

Cultural and moral framings influence employee assessments of the boundary lines between appropriate and inappropriate scent practices. Underlying all is a normalization of fragranced products for the maintenance of olfactory and appearance norms. Previous sociological research highlighted the importance of scent cues in social situations (Largey & Watson 1972; Synnott 1991; Low 2006). The findings in this

chapter show that the use of scented products is often taken-for-granted and seen as necessary not only for meeting olfactory norms associated with limiting the transmission of natural human smells in line with Riach and Warren's (2015) professional body, but also in practices associated with meeting appearance norms in the workplace. For many, the scents contained in mass-marketed products have been naturalized as part of the products themselves and in expectation for how people will smell at work. Fragrances are natural and normalized either as secondary attributes (Jellinek, 1975) of products that people use to enact other norms or as primary attributes (Jellinek, 1975) that help people to enact their identity goals for smelling good.

In terms of appropriate scents, there is an understanding of fragrances as normal and ubiquitous in the products that are necessary for achieving hygiene and appearance standards. For many, emissions from scented products used in daily routines are acceptable because the products are not chosen specifically for how they smell but for the kinds of functions that they perform. In advice to consumer product marketers, Jellinek (1975) described how product scents that are "secondary attributes" of a product serve signal functions to communicate product characteristics, such as gentle, strong, etc., and help to differentiate brands. Citing earlier research, he argued that when fragrances in consumer products are thought to be intrinsic aspects of products, people conflate the functional aspects of the product with the scent of the product (Jellinek, 1975). In this chapter, examples from participants who did not recognize the "original" versions of products as being scented show that effectiveness of product marketing has led to challenges for implementing fragrance policies.

From the perspectives of Not Fragrance Sensitive employees, most coworkers comply with self-regulation in terms of their use of scented products. Only 20% of Not Fragrance Sensitive participants reported that they regularly do not like scented products worn by their coworkers – compared with two-thirds of Fragrance Sensitive participants who reported the same. Employees do not notice scents as much or do not remark on them unless they meet the threshold of what they view as problematic. To some degree, coworkers remain inodorate (Classen 1993), despite using products that continue to emit fragrances into the workplace.

Due to the nearly ubiquitous use of scents in consumer personal care products, participants expressed concern about being able to meet both olfactory and appearance norms without the use of fragranced products. For many, scented deodorants are necessary for protecting against inappropriate smells associated with body odors. Given that the vast majority of interview participants voiced explicit or implicit support for the idea that applying deodorant or antiperspirant is a necessary daily personal hygiene practice, it is clear that employees are conscious about breaching potential norms by exhibiting their own body odors at work. They fear that without scented products, they and their coworkers will be unable to contain or cover body odors emissions.

Not only are scented products used for reducing natural body aromas that are emitted, but they also are used for meeting appearance norms. Employees wonder how they can meet such norms without those products. Some participants challenge fragrance restrictions or requests to change their own practices due to normative criteria for appearance and product performance that participants feel cannot easily be met with

unscented alternatives. The attachment to products for some participants, and thus resistance to changing them, was not about the fragrance of a particular product per se, but because the scent is part of a product that is used to maintain standards of appearance. As in the case of hair products, the further the distance that the intended appearance outcome is from its natural state, the more reliant on products people are to achieve the outcome. After finding products that effectively control and re-arrange the natural physical properties of their hair, participants do not want to go through another process of trying to find products that would work for them – a process that several view as futile because all of the products that they need to achieve their desired hair styles are scented anyway.

The first connection that many participants, particularly those who have not encountered fragrance sensitivity outside of work, make as they process the idea of fragrance restrictions is to moral and cultural frameworks associated with inappropriate fragrance practices. Moral assessments help employees to connect with fragrance restrictions to some degree because many have been bothered by cheap, offensive, or strong scents. Based on interview responses, it is obvious to many employees when others have engaged in moral breaches (Low 2006) of appropriate scent behaviors. This ostensible shared understanding demonstrated though the use of similar words makes people feel like they are on the same page regarding definitions of inappropriate fragrance use even though the descriptors are vague and subjective. Implicit in the act of pointing out such moral transgressions is that the identifier is not also committing them.

The "too strong" descriptor for inappropriate scents can refer to practices, and thus the fault of the user, or to scents in themselves. Not Fragrance Sensitive participants described how scents can be bothersome when others do not know how to appropriately apply fragrances and therefore apply too much. There is a right way to apply fragrance and, if one follows that practice, then the fragrance will not be problematic. Responsibility for offending falls to the individual who has applied too much of a scented product through his/her practices. In the overpowering-due-to-practices assessment, modifying or reducing the amount of fragrance makes the difference in whether a fragrance bothers another person. The conclusion under this rationale is that if people stop over-doing their use of fragrances, then other fragrance restrictions are not necessary.

Normative assessments of scent breaches also support assessments leading to resistance to changing fragrance practices because employees do not think of themselves as emitting offensive levels of scents and therefore do not think their scent practices warrant regulation. Class distinctions highlighted in Largey and Watson (1972) and Synnott (1991) s' theories of odors and scents, respectively, seem to persist among the participants who talked about "cheap" or "too strong" scented products as being problematic. Since inappropriate fragrances are understood as breaches of appropriate moral boundaries, resistance to changing products may be because people do not think that their use of fragrances falls under the problematic categories of cheap, offensive, or too strong. By making it clear that they know how to apply fragrances in a proper manner and that they do not use scents that are cheap, participants tap into moral assessments and set themselves apart from those who do. They may interpret others' requests as

indictments that their scent practices are offensive, too strong, or perhaps even, cheap, and that as such they may feel like requests to change practices are a personal attack on their taste. No one likes to be singled out and told the equivalent of what some interpret as being "you stink". The reflexive dimension – when requests to change practices are interpreted as an indictment on someone's taste – makes some people feel defensive.

Understandings of the range of appropriate scents for workplace cultures have implications for assessments of the fragrance policy and orientations toward changing fragrance practices. Moral assessments of inappropriate scents support baseline rationales for understanding some fragrance restrictions while also limiting the extent of potential changes that employees, primarily but not exclusively those who are Not Fragrance Sensitive, are willing to make in response to the fragrance policy. The results point to general conceptions of moral boundaries associated with how employees should smell at work. The boundaries of acceptable behavior and the amount of/kinds of scents that people are willing to accept are subjective and fall somewhere in between highly fragranced products and noticeable emissions of natural body odors. For many, appropriate scents are defined as ones that are not too heavy or too strong, that are lightly scented, or that are inevitable side effects of products used for their functional attributes. In terms of bodily emissions, it remains taboo for employees to smell like obvious body odor (Largey & Waston, 1972). The next chapter examines employee assessments of fragrances from a health perspective.

Chapter 3: Making Sense of Fragrance Sensitivity: Embodied Experiences, Interpretation, and Contestation

Identifying the source of an illness is an important step toward feeling better, however, the process is subject to contestation, particularly when the identified source is something that others implicitly or explicitly view as benign (e.g. Kroll-Smith & Floyd, 1997; Lipson, 2004). Through an analysis of lay interpretations of fragrance sensitivity, this chapter contributes to an expansion of the concept of contested illness (e.g. Kroll-Smith & Floyd, 1997; Brown, Kroll-Smith, and Gunter, 2000; Brown et al., 2001; Shriver & Waskul, 2006; Brown, 2007) and more broadly to understandings of interactions between synthetic chemicals and bodies (Kroll-Smith & Kelley, 2008). While workplace fragrance policies have the potential to problematize virtually ubiquitous fragrance chemicals in terms of human and environmental health, results from this case study suggest that broader concerns are limited by the framing of reactions to fragrances as allergies. An allergy framework is consistent with dominant paradigms of disease that focus on biological agents as primary sources of disease (Kroll-Smith & Kelley, 2008) while locating the problem within individual bodies rather than looking for underlying social causes (Brown, 2007; Conrad & Barker, 2010). An allergy framework supports the view of fragrances as normalized, benign, and ubiquitous that, similar to natural substances such as pollen, negatively affect some individual bodies. This contributes to support for accommodating Fragrance Sensitive individuals in the workplace while preventing fragrances from becoming broader concerns.

Previous work has described aspects of the lived experiences of people, mostly women, who identify fragrances as a cause of their health problems (Lipson, 2004;

Söderholm et al., 2011) but research has not examined reactions from co-workers who have been asked to change their habits and practices in order to accommodate those with fragrance sensitivity. This chapter examines interpretations of bothersome or negative health effects associated with scents and scented products, using data from people who identify as having fragrance sensitivities as well as those who do not. In contrast to Chapter 2, which identified normative associations attached to scents, this chapter examines interpretations of physical experiences of scents. Given varying degrees of exposure to the concept of fragrance sensitivity, as well as different expectations across departments about the degree to which participants are expected to be fragrance-free, the case study site is a rich venue for exploring how people make sense of health claims attached to the common everyday chemicals in fragrances. The chapter addresses the following two questions: *How do participants interpret negative bodily reactions to fragrances or fragranced products?* And *to what extent has fragrance sensitivity become an accepted claim among employees?* The results expand upon understandings of fragrance sensitivity and embodied experiences of fragrances.

Literature Review

In general, fragrance-free policies have been implemented based on evidence that fragrances can be detrimental to indoor air quality and/or human health. The most recent study of fragrance sensitivity in the United Stated found that 35% of respondents reported health problems associated with fragrance exposures (Steinemann, 2016). In an earlier survey, Caress and Steinemann (2009) found that 30% of respondents reported being irritated by scented products and 19% reported health problems as a result of exposures to

air fresheners or deodorizers. Results were much higher for people with asthma, 38% and 33%, respectively, and even higher for those with chemical sensitivities, 67% and 58%, respectively. They conclude that "sensitivity to fragrances is a widespread condition" that merits future research. However, to date, scientific or medical assessments of potential systemic health impacts of fragrances have been relatively limited. While adverse skin reactions, such as contact dermatitis, to components in fragrance are well-documented and broadly accepted (e.g. Johansen, 2003; Mowad, 2006), there is mounting, yet disputed evidence that inhaling fragrances can trigger asthma, headaches, hay-fever like symptoms, neurological, and psychological effects (Elberling et al., 2005; Perry, 2008; Söderholm et al., 2011).

Fragrance sensitivity is a concept that encompasses negative physical reactions to scented products. Underlying causes for reactions to airborne exposures to chemicals in fragrance have been attributed to odor intolerance (Knaapila & Tuorila, 2014), sensory hyperreactivity (Larsson & Mårtensson, 2009; Söderholm et al., 2011), chemical intolerance (Nordin, Andersson, & Nordin, 2010) and multiple chemical sensitivity (MCS) or environmental illness (Caress & Steinemann, 2009; Lipson, 2004; Martini, Iavicoli, & Corso, 2013). Research cited in this paragraph points to uncertainty in conceptions of these constructs. For example, in Sweden, sensory hyperreactivity has a degree of official legitimacy and can be medically diagnosed through the capsaicin provocation test but is coded as "unspecified abnormalities of breathing" (Söderholm et al., 2011).

Fragrance sensitivity may be an illness in itself or a manifestation of a broader condition. Many studies identify fragrances as agents that induce ill effects for people

with MCS or environmental illness (Martini et al., 2013; Caress & Steinemann, 2009; Lipson, 2004). Across the United States, there are numerous examples of employees requesting workplace accommodations on the basis that fragrance exposures in the workplace triggered symptoms of MCS (Simpson, 2013), a contested illness. MCS is not a disease since biomedicine holds authority to define disease and it has not yet officially embraced MCS (Kroll-Smith & Floyd, 1997; Murphy, 2006). Establishing legitimacy for the illness is a challenge because the tools to biologically measure the relationship between environmental contaminants and MCS systems are underdeveloped and the frameworks supporting the scientific assessments on which etiologies of disease are based do not allow for the kinds of environmental impacts that MCS claims (Kroll-Smith & Floyd, 1997). In the almost two decades since Kroll-Smith and Floyd published their book, there has been some progress in terms of clinicians' ability to measure aspects of MCS and treat it, however, Martini and colleagues (2013:1) show that "the etiology … of MCS is still not clear" and "there still seems to be no case definition accepted by all healthcare workers". Despite examples of successful clinical therapies that reduce physical issues associated with MCS, there are still physicians who claim that it is primarily a psychological issue (Genuis, 2013).

The example of fragrance sensitivity in the workplace provides insight into an emerging issue where mitigation of symptoms and improvements in illness experiences are determined to varying degrees by interpretations and corresponding decisions made among lay people. Scholars of contested illness primarily examine disputes over interpretations of symptoms and illness from the perspectives of lay people versus those of experts (Brown et al., 2001; Shriver & Waskul, 2006). Over the past twenty years,

there have been a number of health movements that have sought legitimacy, official recognition, and relief for illnesses related to environmental exposures including MCS and Gulf War Illness (GWI), which affected returning veterans from the first Gulf War (Brown et al., 2001; Shriver et al., 2002; Shriver & Waskul, 2006). Each side of the contested illness debate engages in claims-making to either refute or legitimize an illness based on whether one is trying to deflect responsibility for it or generate support for those experiencing it, respectively (Brown et al., 2001; Shriver et al., 2002). Research cited in this paragraph shows that the key struggle is often between people experiencing an illness and their advocates on one side and the biomedical establishment, supported by government, on the other side.

In workplaces, including those with voluntary fragrance policies, coworkers must decide whether to change their habits, routines, and personal care practices in order to accommodate requests that claim harm associated with exposures to fragrance chemicals. Online articles and blog posts about workplace fragrance policies, and corresponding reader comments, display some of the contestation around health impacts and attitudes towards the degree to which employees should make changes in their practices to accommodate claims of fragrance sensitivity (e.g. Tillotson, 1999; Buckland, 2012; Kanner, 2012). Researchers have demonstrated that contestation among family, friends, and colleagues directly impacts quality of life for people who are dealing with environmentally-related illnesses (Kroll-Smith & Floyd, 1997; Shriver & Waskul, 2006; Lipson, 2004). For example, Lipson (2004) wrote about resistance that several people with fragrance sensitivities experienced from family, friends, and coworkers including minimizing of their experiences and "retaliatory perfume spraying in the office" in

response to requests to stop wearing perfumes or scented products. A more recent study documented similar workplace challenges for those with sensitivities to fragrances including a lack of understanding and respect from others that made it difficult or impossible for some of the participants to continue working (Söderholm et al., 2011).

One gap in the literature is to understand whether assessments and contestation among lay people is similar to that of broader contested illness debates. Challenges abound in the process of defining and legitimizing contested illnesses. In practice, illnesses with suspected environmental etiologies are often contested because it is extremely difficult to causally link specific environmental exposures to the manifestation of a disease, particularly since exposures happen over long periods of time and many studies of disease are done through epidemiological assessments (Brown et al., 2000; Davis, 2002; Tesh, 2000). This "problem of uncertain science" often leads to contestation about the nature of the illnesses blamed on environmental exposures (Brown et al., 2000). The process of connecting environmental exposures to illnesses is complicated by adherence to a dominant epidemiological paradigm that focuses on individual factors rather than environmental factors in disease prevention (Brown, 2007) and current conceptions of illness causation that limit the potential for conceptualizing impacts of synthetic chemicals on/in the body (Kroll-Smith & Kelley, 2008).

In an analysis of how dominant understandings of the relationships between bodies and the environment evolve over time, Kroll-Smith and Kelley (2008) show that contemporary knowledge of environmental impacts that are taken-for-granted, such as the potential of pollen to cause sinus reactions in allergic individuals, are "historical, subject to alteration, and rooted in mass advertising, medical practices, and the cultural

politics of the modern body (p305)." In the early 21st century, there are emerging framings of illness experiences that incorporate understandings of the impacts of synthetic chemicals in bodies in contrast to predominant understandings of illness and disease that focus on biological agents that infect individual bodies (Kroll-Smith & Kelley, 2008). With their concept of "ecological impairment", Kroll-Smith and Kelley (2008) contend that both the body and the environment are sick and need interventions when synthesized chemicals in the environment cause problems for bodies and that a broader focus on the impacts of "industrial environments in bodies" is necessary to make that shift. For more than a decade, biomonitoring analyses have regularly detected hundreds of synthetic chemicals within bodies (Centers for Disease Control and Prevention, 2017). A growing body of research documents negative health impacts associated with many of them (e.g. Chey & Buchanan, 2008; Weschler, 2009; Mitro et al., 2016; Krimsky, 2000; De Coster & van Larebeke 2012; Vandenberg et al., 2012; Dodson et al., 2012).

Insight into how employees understand claims of fragrance sensitivity sheds light on the ideologies of illness that underlie their interpretations. Some of the symptoms that people with fragrance sensitivity experience are similar to those of people with hay fever or other allergies such as nasal symptoms, breathing difficulties, and hives. As will be described in this chapter, a majority of participants interpret Fragrance Sensitive reactions as an allergy or potential allergy. While allergic reactions are an established biomedical category, allergy is defined as a specific immune system response which limits the functional utility of allergy as a descriptor or category for describing the cause of a range of symptoms (Jackson, 2006; Raffaetà, 2012). For example, a recent review conducted

for the fragrance industry assessed whether available evidence suggests that fragrance chemicals that are known skin sensitizers also pose risks as inhalation allergens (Basketter & Kimber, 2015). Limiting their inquiry to "allergic asthma" reactions, the researchers excluded any potential non-asthma inducing allergy reactions as well as any non-allergic asthma reactions that might be based on inhalation exposures (Basketter & Kimber, 2015).

Raffaetà (2012) argues that while biomedicine narrowly defines whether allergy is the cause of symptoms, the concept of allergy also functions in everyday life "as a wide cultural category with ambiguous contours" that is used by people to interpret physical experiences that are not encompassed by biomedical definitions (p341). When people attribute their symptoms to allergies it can lead to questioning and contestation. Lay people sometimes self-diagnosis their allergies or intolerances which can lead to struggles for acceptance by health professionals and among their family and friends (Nettleton, Woods, Burrows, & Kerr, 2009). Page-Reeves (2015) discussed how medical professionals view self-diagnosis as "perceived" in contrast to "real" allergies that have been officially diagnosed. Those who are medically diagnosed and people with acute reactions find their conditions less socially problematic than those with less severe reactions to allergens (Nettleton et al., 2010)

By virtue of its' existence, the workplace policy establishes some legitimacy for the assertion that there are negative health impacts related to fragrance exposures. The policy removes questions of biomedical authority from the equation by not requiring individuals to document sensitivities. Illness experiences depend on interpretations and actions taken among lay coworkers. The two main findings sections in this chapter focus

on interpretations of negative physical reactions to fragrances in participants' own bodies and their assessments of the legitimacy of the concept of fragrance sensitivity. This chapter contributes to understandings of: interpretations of the impacts of synthetics on bodies; contested illnesses and lay interpretations absent medical documentation or expert intervention into the discourse; and lived experiences of people with and without fragrance sensitivity who work under fragrance restrictions.

Associating fragrance irritation with allergy is something that contributes to support for the policy to some degree while also limiting the potential of fragrance reactions to increase awareness of chemical interactions in bodies (Kroll-Smith & Kelley, 2008). As described further in Chapter 2, many participants described fragrances as being everywhere and that even unscented products have scents. Fragrances are often defining characteristics of the experience of using products and can be more effective in product marketing if people think that the scents are intrinsic to the functioning of a given product (Classen & Howes 1994; Jellenik 1975). The allergy framework provides both a convenient explanation for reactions to fragrances that are normalized in contemporary American consumer society and the potential for uncertainty and rejection of claims of fragrance sensitivity.

Methods

Data for this chapter are from interviews with 50 participants from the case study site. Since not all departments have implemented the policy to the same degree, participants have a range of experiences with fragrance restrictions, exposures to fragrances at work, and connections to coworkers who identify as being Fragrance

Sensitive. Individual interviews lasted an average of one hour and were conducted at the workplace during working hours. During the interviews, I asked a number of questions to elicit participant views on fragrance sensitivity. Participants were asked about fragrance and scent preferences as well as whether they have had negative reactions to fragrances or scented products. Interview topics also included experiences with, and assessments of, people who are Fragrance Sensitive both inside and out of the workplace. Questions about the workplace policy also generated insight into views about fragrance sensitivity. Interviews were transcribed and then coded in MAXQDA.

Data analysis for understanding participants' experiences with and conceptualizations of fragrance sensitivity was a multi-step process that incorporated inductive and deductive approaches. The first step was line-by-line thematic coding of all interview data. During the first pass, I coded for direct mentions of fragrance sensitivity. While analyzing interview data for other chapters, I made note of subtle references to fragrance sensitivity. I used those notes to guide recoding the interview data specifically for fragrance sensitivity: all direct and subtle references to fragrance sensitivity were coded as "fragrance sensitivity" and then retrieved in a separate document. I then analyzed the "fragrance sensitivity" coded segments and summarized the following items in a table for each participant: whether s/he identifies as being Fragrance Sensitive; bothersome effects that s/he experiences from fragrance exposures; how s/he deals with bothersome effects; and how s/he describes fragrance sensitivity in others.

Assigning Participants to Fragrance Sensitive Categories

As a symptom/problem without an official definition, fragrance sensitivity is conceptualized and interpreted in a variety of ways based on physical experiences of fragrances and knowledge of potential connections between fragrances and negative reactions in the body. Sorting participant experiences into categories of fragrance sensitivity was a complex process because there are many dimensions of these experiences, including how participants think about fragrances in relation to their own bodies; how they understand/what they think of the concept of fragrance sensitivity in general; and whether and how that concept is relevant to others. With the goal of separating out personal experiences of fragrance sensitivity from views on how and whether fragrance issues should be accommodated in the workplace, I developed two spectrums on which to measure participant experiences and assessments of fragrance sensitivity. The first organizes participants according to their experiences with fragrance sensitivity in their own bodies and the second categorizes participants' level of acceptance of fragrance sensitivity as a legitimate issue that deserves accommodations in the workplace. Assigning participants to points along the latter spectrum was easier than the former and a description of that spectrum is included later in this chapter. The next few paragraphs highlight the process and some challenges of delimiting categories of fragrance sensitivity and assigning participants to those categories.

The interviews provide a source of rich contextual data regarding experiences of fragrance sensitivity as well as preferences and incidence of use of fragranced products. Participants were asked when they first encountered the concept of fragrance sensitivity

and whether they know anyone who experiences it. I did not ask everyone directly if they considered themselves to have fragrance sensitivities, in part because I collected a variety of contextual data about participants' experiences with and orientations toward fragrances and fragrance sensitivity including whether they have had negative reactions to scented products. A majority of participants identified themselves as either Fragrance Sensitive or not during the interview. For six participants, I used contextual interview responses to assign them to categories of fragrance sensitivity.

Categorizations of fragrance sensitivity incorporate both identity and physiological/biological aspects operationalized through participants' descriptions of physical experiences with fragrances as well as their own interpretations of their physical experiences. Preferences in favor or against various fragrances were not taken into account when assigning participants to categories. There are two main categories along the Fragrance Sensitivity spectrum: Fragrance Sensitive and Not Fragrance Sensitive. Toward the middle of the distribution are the following two subcategories: Fragrance Sensitive participants with less frequent or less severe reactions are categorized as "Somewhat" Fragrance Sensitive while participants who do not consider themselves to be Fragrance Sensitive, but have said that they have becoming more sensitive to scents since working in a less-fragranced environment are included in the "More Aware Of Scents" category. Table 3.1 highlights the four categories and shows the number of case study interview participants within each category. A total of 38% were in the two Fragrance Sensitive categories and 62% were in the two Not Fragrance Sensitive categories.

Table 3.1: Fragrance Sensitivity Spectrum

Fragrance Sensitive		Not Fragrance Sensitive	
Fragrance Sensitive	Somewhat Fragrance Sensitive	More Aware of Scents	Not Fragrance Sensitive
Identified as being Fragrance Sensitive during the interview and described ongoing reactions to fragranced products.	Experience less frequent, less extensive, and/or milder reactions to fragrances than those in the Fragrance Sensitive category.	More awareness of scents since working in a fragrance-free environment. May experience isolated reactions, and the reactions are limited in scope.	Do not have negative physical reactions to fragrances. May have had an incidental negative reaction or two.
N=10	N=9	N=11	N=20

Toward the middle of the spectrum, there were six cases that were challenging to categorize because the participants did not directly identify themselves as Fragrance Sensitive or not. To varying degrees, they have had negative reactions to fragrances or scented products but all downplayed their own reactions to fragrances or scents. In describing their reactions to scented products, three said something along the lines of 'I don't have an allergy, but…. I have had some reactions'. For all challenging cases, I re-read their full interviews and then reviewed Fragrance Sensitive codes from participants in the other categories and compared the challenging cases to those cases. Based on a review of the data, two of the challenging cases were categorized as "Somewhat" Fragrance Sensitive because their descriptions of their reactions to fragrances as well as their ongoing efforts to manage their fragrance exposures in and out of the workplace fit with others in the "Somewhat" sensitive subcategory of Fragrance Sensitive.

The participants who did not directly identify their Fragrance Sensitive status but who described experiencing some negative reactions to fragrances help to illustrate some

of the complexity of parsing out categories and descriptions of fragrance sensitivity. The four cases that were more challenging to categorize came from high implementation departments that have had the fragrance policy the longest and that implemented the policies due to employees with severe and obvious negative reactions to fragrances. The four participants who do not necessarily think of themselves as being Fragrance Sensitive have had reactions to fragrances and have become More Aware of Scents since being in a fragrance-free workplace but they are not people who complain about others' use of fragrances at work. While they are sympathetic to and support accommodations for Fragrance Sensitive colleagues with severe reactions, they use language of "the other" to talk about their Fragrance Sensitive colleagues who have severe reactions to fragrances or who outwardly identify as being Fragrance Sensitive within their respective departments. For this analysis, all four are included in the "More Aware of Scents" category and represent the point at which there is some overlap between the physical fragrance-related experiences of those in the Somewhat Fragrance Sensitive and More Aware of Scents subcategories.

The findings include examples of experiences and interpretations of fragrance sensitivity from the perspectives of participants along the Fragrance Sensitive spectrum. The first section includes a description of a framework that underlies conceptions of fragrance sensitivity among participants – that of allergy. The sections that follow analyze differences in experiences associated with fragrance exposures for participants along the fragrance sensitivity spectrum.

Findings Section I: Experiences along the Fragrance Sensitivity Spectrum

Overview of Fragrance Sensitivity – Allergy Dimensions

During interviews, 80% of case study participants across the fragrance sensitivity spectrum talked about physical reactions to fragrances as allergies. In other words, they think that Fragrance Sensitive individuals are or might be "allergic" to scented products. Though the policy includes the health of employees as a rationale for reducing the use of fragrances, it does not say anything about allergies. Many understand the rationale for the fragrance policy as limiting exposures to fragrances for employees who have allergic reactions to fragrances or scents. The concept remains hypothetical for the participants who have only heard about fragrance sensitivity in the workplace and who do not know anyone who exhibits such sensitivity. In contrast, a few in the "More Aware of Scents" category fear that as the policy reduces exposures to scents, it might make more people allergic to scents in the long run.

Participants across the fragrance sensitivity spectrum compared fragrance sensitivity to allergic reactions to environmental triggers such as pollen or dust. Some of the Fragrance Sensitive participants said that they had allergies to perfume and cologne. A few participants articulated that people can be allergic to just about anything including fragrances. One Not Fragrance Sensitive participant summed up her understanding of negative reactions to fragrances by saying that people can be allergic to "everything under the sun including the sun". Some of the participants who conditionally accept fragrance sensitivity said things like 'everything is scented' and 'How do they function in the world?' in reference to Fragrance Sensitive participants. They do not want to be

sensitive or bothered by scents because, as they have observed, scents are in the vast majority of personal care products and are ubiquitous in venues of public life including transportation, shopping, entertainment facilities, and other places where people gather.

Not all reactions are thought about as being allergies: participants also talked about fragrances triggering asthma or other breathing issues, which some tied back to allergies. A few talked about fragrance sensitivity being an issue in itself. Understanding fragrance sensitivities as allergies is different than thinking about reactions to scents as irritants or as indicative of chemical sensitivity. In part because, though allergies might be used colloquially to describe bodily reactions (Raffaetà, 2012), allergies officially only describe a particular kind of immune system response (Jackson, 2006). As stated earlier, fragrance sensitivity encompasses reactions to airborne scents and is distinct from contact dermatitis associated with direct exposure of skin to fragrance chemicals. Sometimes referred to as "fragrance allergy", skin rashes associated with fragrance exposures are well-documented in the medical literature and formal medical tests exist to identify cases to some degree (Johansen, 2003; Mowad, 2006).

Fragrance Sensitive – Variations in Types and Degrees of Negative Fragrance Experiences

With variations in the types of fragrances that cause reactions, Fragrance Sensitive participants made clear connections between exposures to fragrances and negative health impacts. They described a variety of reactions that they experience due to fragrance exposures. These include allergy-like symptoms such as sneezing, runny nose,

or sensation of a blocked nose; headaches; dizziness; confusion; fatigue; coughing; and asthma attacks. In the interviews, a number of Fragrance Sensitive participants reported multiple reactions to fragrances and scented products. For example, one said: “Typically, I can get stuffed up to where I can't breathe. My eyes will water to the point where I won't be able to see very clearly, sneezing, coughing, rashes - sometimes I'll even end up with red rashes.” Another, who said that her fragrance sensitivities started when she went through menopause, described a different set of reactions:

> It's like I've snorted something on fire because all the insides of my nose and my sinuses burn. My eyes will get really dry and they feel crispy. Sometimes I'll start to sneeze. My throat feels raw. I start to get a headache or times I'll just feel sick to my stomach…. And in some cases, it causes me to have an asthma attack, so I’ve always got my inhaler with me. (Fragrance Sensitive)

Fragrance Sensitive participants experienced the onset of their sensitivities at different ages. Some said that they have always been sensitive while others say that their sensitivities emerged in adulthood.

The people on the somewhat end of the fragrance sensitivity group experience limited negative physical reactions to scents. They say things like ‘the scents don’t make me sick’ or I don’t have life-threatening reactions to scents’ to qualify some of their reactions and to distinguish themselves from people who have more serious or extensive reactions to fragrances or scents. For example, one distinguishes her reaction of feeling nauseous from reactions that others might experience as a result of fragrance exposures.

> I get nauseous. I do not like fragrance, I'm a non-fragrance person. I like subtle, powdery fragrances. Anything floral or musk, it really throws me off. I'm not allergic in the sense that I'm going to have coughing spells, but it is something that I - I don't like to smell. It's right up there with cigarette smoke for me. (Fragrance Sensitive)

Fragrance Sensitive participants described a range of reactions, severity of reactions, and exceptions or tolerable scents in their own bodies and often compared their reactions with those of others.

> Well, I'm a person who's sensitive to fragrance…. I'm not hypersensitive, but I do have - it's not all fragrance, it's just certain - like I can't very easily walk through [department stores] through that fragrance section - I kind of hold my breath when I go through there, but I don't avoid in entirely. I know some people are very sick and by those things, I'm not. I get a headache or something, but it's not debilitating - completely debilitating. (Fragrance Sensitive)

By saying that she knows "some people are very sick" from exposure to fragrances but that her reactions are not "debilitating", the participant acknowledged that others have more severe reactions than she experiences.

Among Fragrance Sensitive participants, there were variations in the types of fragrances that cause reactions, or conversely, that are tolerable, pleasant, or enjoyable. Some said that their reactions were limited to perfumes or colognes while others reacted to a broader array of fragrances including those in laundry and personal care products. A number of Fragrance Sensitive participants made a distinction between, and talked about being able to better tolerate, "botanical" or "natural scents" rather than "artificial" ones. For example, one said:

> The more natural fragrances do not - they're annoying but they don't make my nose close-up. And some of the non-natural ones, my eyes start to water, my nose starts to close up, and then I'm all the sudden, it's like an allergic reaction without hives…. (Fragrance Sensitive)

In most cases, Fragrance Sensitive participants talked about having to test scents prior to purchasing a product. In some cases, they can only use one scent in a product line. For example, one responded to the question about whether she uses a scented deodorant, "It's [brand name]… and it's - I think it's aloe. I think it's aloe. Yeah, it's the only one I can use." In general, Fragrance Sensitive participants can identify their own negative health impacts when they encounter scented products, however, they cannot always identify which fragrances or scents will cause reactions and which will not.

Fragrance Sensitive participants were open about their sensitivity with coworkers to varying degrees. Most are comfortable directly speaking to coworkers when fragrance issues arise while a few like the anonymity associated with making fragrance complaints through a supervisor. For example, one Fragrance Sensitive participant, for whom colleagues' perfume "does choke me up and it can give me a really splitting headache" has not had conversations about her fragrance sensitivity with her colleagues, but she has been accommodated in the few requests that she has made through managers. She prefers not to have a discussion about her sensitivity directly with coworkers and feels that she should not have to since there is a policy in place. Only one Fragrance Sensitive participant, who among other reactions, experiences watery eyes, sore throat, and then has difficulty sleeping after a workday perfume exposure, refused to complain about colleagues' occasional use of perfume out of fear of retaliation and ostracism for complaining.

The two Fragrance Sensitive participants who do not like and would prefer not to have a policy both have seasonal allergies and associate their fragrance symptoms with those allergies. They each feel that they are able to manage their own reactions to fragrances in the way that they manage their reactions to other allergens. One of the participants compares any negative fragrance reactions to her other seasonal allergies and says that taking allergy medication helps to alleviate any symptoms. The other loves to wear scents, views them as part of her identity, and still wears perfume to work most days. While there are certain fragrances and items, such as dryer sheets, that she completely avoids due to her own negative reactions, she carefully manages her personal fragrance use and feels that she is able to reduce negative reactions that way.

In sum, fragrance sensitivity manifests in different ways among different people. Symptoms associated with fragrance exposures, the kinds of fragrances or scents that are connected with negative physical reactions, and the severity of reactions varied across Fragrance Sensitive participants at the case study site. Different degrees of sensitivity and fragrance triggers mean that many are still able to use some fragranced products. Participants ranged from being able to tolerate very few scented products to one who regularly uses carefully selected perfume. A number of participants downplayed their own experiences of fragrance sensitivity by comparing themselves to others with more severe reactions. There were varying degrees to which Fragrance Sensitive participants felt comfortable identifying themselves as such to their colleagues. Having a fragrance policy in place has allowed those Fragrance Sensitive participants who seek to remain anonymous to do so.

Not Fragrance Sensitive – Isolated Unpleasant Fragrance Experiences

More than 60% of the participants in the case study do not identify as Fragrance Sensitive. Over half of the Not Fragrance Sensitive participants talked about having some bothersome experiences with fragrances or scents – these experiences occurred both in and out of the workplace. A few talked about isolated incidents of having adverse reactions to specific fragranced products. For example, one said that he is sometimes bothered if he uses "too much" of his scented laundry detergent on his sheets. He also had an experience where he felt sick from a nurse's perfume while recovering from surgery in the hospital. A few participants each talked about coughing or getting a headache from a specific perfume or cologne worn by a specific coworker in the past. In general, the Not Fragrance Sensitive participants may not like some fragrances, but they do not feel like exposure to fragrances causes ill-effects except for very specific, isolated incidents usually associated with an anomalous scent or someone applying too much of a scent.

As discussed in Chapter 2, Not Fragrance Sensitive participants may dislike some scents or fragrances or be "offended" by scents that are too strong. Many take-for-granted that some fragrances, or applications of too much fragrance, can cause headaches, coughs, or induce a physical reaction of disgust. In general, Not Fragrance Sensitive participants who have experienced such reactions view them as isolated problems that are part of the normal range of reactions to fragrances or scents and not as indications of an underlying health issue or a reaction to a harmful substance. For example, one employee stopped using a "loud-smelling" strawberry scented lotion after a short time "because it

started to make me a little dizzy". The participant views feeling dizzy from one fragrance as an isolated example of a particular scent that caused a problem. Since she enjoys using other scents, she thinks of that example as an anomaly.

More Aware of Scents - Changes in Embodied Perceptions and Increased Awareness of Scents

While a number of Not Fragrance Sensitive participants, particularly in lower implementation departments, have not had to change their habits and practices, a number of those who have reduced their use of scented products said that they have become more sensitive to fragrances or scents. To be clear, the participants in this group do not identify as Fragrance Sensitive. Instead, they view the changes in their embodied perceptions of scents and an increase in their ability to physically perceive scents as "becoming more sensitive". To avoid confusion in this chapter, "becoming more sensitive" is framed as "More Aware of Scents". The 11 participants in this category said that they notice scents a lot more than they did prior to working in a fragrance-restricted environment. Scents that they notice more include fragrances added to products as well as natural aromas emitted from things like flowers, plants, foods, and other humans. Some of the participants who have become More Aware of Scents also said that they have had bothersome reactions or they are irritated by the levels of scents that they are now able to perceive. They do not consider the irritation to be a medical or health issue, but more of an annoyance. Some fear that they might develop fragrance sensitivities from a lack of exposure to scented products.

The Not Fragrance Sensitive people who said that they have become More Aware of Scents are those who have made some changes to their own scent practices and are around others who have done the same. A majority work in high implementation level departments, those with policies that have existed for more than a decade and from which 94% of interview participants had made changes to their products to comply with the fragrance policy. The rest are participants who work in departments with medium levels of implementation who have stopped wearing perfume and other scented products to work.

For the most part, people who either really enjoyed wearing scented products or who were neutral about scents do not like that they had become More Aware of Scents. One woman changed her products and stopped wearing scented lotions in response to her workplace's fragrance policy. After living with that for many years, she said that it has made her "hypersensitive" to scents when she does encounter them:

> It also creates a hypersensitivity to fragrance when you don't work in it. Cause I can say I've never had an issue, but I will be overwhelmed by it now because of the way that we have it here, so, in any level of scent - you get in the elevator and you can smell [someone's] aftershave or shaving lotion, or something like that, or somebody's deodorant. It becomes that hypersensitive to different - just from living in this kind of environment. (Not Fragrance Sensitive)

Though using the term, "hypersensitive", she does not consider herself to actually be sensitive to scents. When asked if she has ever had negative reactions to fragrances she said no. For her, "overwhelmed" means that she can smell or taste the scents in a way that she could not before:

> Well, it's, I guess it's - it bothers me now. I mean, I can be somewhere and somebody has on a heavy perfume and it overwhelms my sense of smell or taste- it's all I can - you can't get out of your head, your nose, whatever, so, and before that wouldn't have bothered me. (Not Fragrance Sensitive)

While that participant talked about the experience of feeling overwhelmed by "heavy" fragrances, a number of participants talked about how being in an environment without many scents has made them much more attuned to "normal" amounts of scents. For example, one talked about what it is like to be More Aware of Scents out in the world.

> You become a lot more sensitive working in this environment to fragrance, if I go to the mall and walk around, someone could be wearing a normal amount of perfume or a normal amount of cologne, and I'll be like 'holy mackerel' it's coming out of her pores or his pores. …. I think the environment definitely makes you more sensitive to fragrance, good and bad. So, I think your nose becomes far more sensitive to anything, so maybe these people in all reality, maybe they smell normal, if you walk by them on the street you wouldn't notice…." (Not Fragrance Sensitive)

Scents that used to blend into the background have become noticeable, and at times unpleasant, to people who have become More Aware of Scents. For one, who changed all of her products to fragrance-free in order to comply with the policy, becoming More Aware of Scents means that she can smell scents that she could not before. The bothersome part of noticing more scents is that the perception includes bad scents and natural odors. She said: "I don't like it. I don't like being ultra-sensitive to smell." She is clear that her stronger perception of scents "Hasn't made me sick. no, no. and I'm grateful for that, cause I know scents can trigger migraines….". While she complies to a high degree with the policy, and understands the rationale for it, she thinks that it might have the unintended side effect of making people more sensitive to fragrances and scents:

> I understand why they do it - I do. I mean, cause you have competing scents, everyone's gotta one-up somebody else, I'm sure, but I think we're just gonna create a bunch of hypersensitive people to smells." (Not Fragrance Sensitive)

Like several other Not Fragrance Sensitive participants who feel that they have become More Aware of Scents, being "overwhelmed" by good and bad smells is not pleasant to the employee, but she does not view it as indicative of an illness or an underlying condition.

A few of the participants who became More Aware of Scents fear that not being exposed to fragrances might make people more sensitive to them. This thinking is along the lines of the hygiene hypothesis for the development of allergies, which theorizes that increases in allergy rates are due to societies being "too clean" and people not being exposed to enough bacteria (von Mutius, 2007). One employee stopped using scented lotions and body sprays on work days after the organization-wide policy was implemented. She says that she's "a little more sensitive to [scents], but not in a bad way." However, like other participants who have become More Aware of Scents, she wonders if the lack of exposure to scents will create problems in the future:

> I think people make big deals out of things…. And, you know, it's like people are so picky these days about things that it's like, what is it really doing to your immune system? If everybody - let's just wipe perfume off the planet and then one day I wear it and then everybody gets sick and drops dead because their immune systems can't handle it because they just sterilized their whole life. So, people are just - get too crazy about things. (Not Fragrance Sensitive)

Participants who are "More Aware of Scents" have experienced changes in their scent perceptions since modifying their own fragrance practices and working in less-fragranced environments. To some degree, they have engaged in an experiment of scent reduction and are describing results of that experiment. They describe changes in their bodies that enable them to perceive scents to a greater degree. Though a few experience some of the same kinds of reactions as people on the somewhat end of the Fragrance Sensitive spectrum, they do not identify as Fragrance Sensitive. They attribute such reactions to changes in their bodies that are a result of using fewer scents and working in a less-fragranced environment. They notice scents more than they used to and are conscious of, sometimes struck by, "normal" levels of scent that would have previously remained in the background. While sharing their own experiences of being More Aware of Scents, several of them distanced themselves from the people who claim fragrance sensitivity. They do not want to be abnormal or to have problems with scents. Some are afraid that lack of exposure to fragrances might cause them to become allergic to fragrances.

Findings Section II: Assessments of Fragrance Sensitivity as a Health Issue Deserving of Accommodations in the Workplace

In general, participants made one of four types of assessments as to whether fragrance sensitivity is a health issue that deserves to be accommodated in the workplace. The four general points along the spectrum are Rejection, Possibility, Conditional Acceptance, and Acceptance. Participants were organized into the categories based on their interview responses. Their views are informed by their own fragrance reactions as

well as interactions with Fragrance Sensitive people in and out of the workplace. Table 3.2 shows the distribution of interpretations by Fragrance Sensitive status. All except for two of the Fragrance Sensitive participants are in the Acceptance category while the Not Fragrance Sensitive participants are represented in each of the four categories.

Table 3.2: Acceptance of fragrance sensitivity and accommodations in the workplace

	Not Fragrance Sensitive	Fragrance Sensitive
Acceptance	11	17
Conditional Acceptance	12	2
Possibility	7	-
Rejection	1	-

There was only one person who emphatically rejected the idea that fragrance can cause negative health impacts. The person in the Rejection category said that fragrances have never bothered him, there have not been any fragrance issues in his department which means that he has not had to make any changes to his practices, and the only time he heard about fragrance sensitivity was when an uncle who he called a "hypochondriac" complained about it. Even though the participant stated that he does not believe in fragrance sensitivity, in other parts of his interview he said that there should not be policies for something that potentially impacts a miniscule proportion of the population.

Participants who think that fragrance sensitivity is possibly a health issue, but are uncertain, include those who first heard about fragrance sensitivity when the policy was enacted in their workplace. They generally do not have family or friends with known

fragrance sensitivities. A majority of those who view fragrances as possibly causing health issues have not had to make changes to their own scent practices in their workplace, however, under hypothetical circumstances, they said that they would change for a coworker. "I have no reason to disbelieve it" is an example of a "Possibility" interpretation from someone who wears cologne to work but is open to discontinue using it if a coworker were to express concerns. One had only heard of scents as potentially causing negative health effects such as headaches that day: He previously thought that the fragrance policy was enacted because some people wear fragrances or scents that are too strong and therefore can be distracting in the workplace.

A majority of participants fell into the "Conditional Acceptance" and "Acceptance" of fragrance sensitivity categories, which are discussed below. Those in the Conditional Acceptance category believe that some people may react in acute, severe ways to certain fragrances, and a number have witnessed such reactions in person in the workplace. While accepting acute reactions, people who conditionally accept fragrance sensitivity question the extent of reactions for coworkers who claim to be Fragrance Sensitive. Skepticism is supported by experiences with contestation over fragrances in the workplace. The Conditional Acceptance group includes two participants who are Fragrance Sensitive.

The Acceptance of fragrance sensitivity category includes both Fragrance Sensitive participants and those who are not Fragrance Sensitive. Many people in this category talked about fragrance sensitivity as including a range of health impacts and a variety of sensitivity levels. Fragrance Sensitive people and those with close family and friends who have sensitivities generally think of fragrance sensitivity as a health issue

that deserves to be accommodated in the workplace. Most of the Not Fragrance Sensitive participants in this category have not witnessed workplace disputes over fragrances and therefore have not had their acceptance levels tested in the ways that some of the people in the Conditional Acceptance group have.

Having a policy in place seems to moderate some of the potential impacts that a lack of awareness about or contestation over fragrance requests may have on those who are Fragrance Sensitive. Many participants at the case study site follow the fragrance policy, in part because they follow work rules, even if they are skeptical about fragrance sensitivity and question the degree of sensitivity among Fragrance Sensitive coworkers. There is not a clear correlation between the way that people interpret fragrance sensitivity as a health issue and whether and the extent to which they make changes to comply with the policy. For example, one of the supervisors in the Possibility category follows and enforces the fragrance policy despite expressing uncertainty regarding the extent to which others experience fragrance sensitivity. A number of participants who conditionally accept fragrance sensitivity have made extensive changes to their practices as a result of the policy.

Factors Contributing to Conditional Acceptance of Fragrance Sensitivity as a Health Issue

All of the employees in the Conditional Acceptance category have had experience with Fragrance Sensitive coworkers and many have seen or participated in contestation regarding fragrance sensitivities in the workplace. Their perspectives shed light on some of the factors that contribute to skepticism and contestation regarding fragrance

sensitivity. This section analyzes factors that influence the extent to which participants in the Conditional Acceptance group accept the idea of fragrance sensitivity as a health issue that deserves to be accommodated. Factors include perceptions of the experiences of Fragrance Sensitive individuals as well as reflections on what happens in their own bodies.

In general, employees in the Conditional Acceptance category believe that some people have severe reactions to fragrances or scented products that deserve to be accommodated in the workplace. Many of them have seen such reactions among coworkers including obvious breathing difficulties and asthma attacks. Some were surprised about the connection between fragrances and the reactions when they first heard about such reactions or saw them happening. In the presence of severe reactions, and stricter fragrance policy implementation, they have made changes to their fragrance practices. Even if they were initially not happy with the requests, many said that they accepted the need to make changes that were necessary for the health of their severely affected coworkers.

While employees in the Conditional Acceptance category believe that some individuals experience obvious severe reactions to scented products that deserve to be accommodated in the workplace, they question the degree to which people feel ill-effects when reactions are not obvious. For some, it took a while to accept that fragrance exposures can cause less severe and less obvious reactions and that such reactions should be accommodated. For example:

> I thought it was the individuals themselves [who] wanted to cause a stir.… It's a form of how they can control other people and that's really … how it kind of came across.... I don't know, but when I could actually see, … a physical reaction and once in a while with perfume, I would see them having - you could hear their voice change, a little bit, so then you kind of realize, "oh, maybe it is really a problem", but, like I said, it took a while for us to get over the fact that it's not personal if a complaint was made….(Not Fragrance Sensitive)

Conditional Acceptors generally think that some people have allergies or other negative reactions to scents, but inconsistencies in fragrance complaints support skepticism about potential fragrance impacts. One practice that contributes to skepticism of Fragrance Sensitive claims is coworkers who "all of a sudden" became Fragrance Sensitive after the policy went into effect. There were a number of participants who said that they were surprised when their coworkers started to complain about products that they had been using for years. They wondered if that meant such coworkers actually were experiencing negative reactions or if they were using the policy as an excuse to complain about other coworkers. Complaints made by Fragrance Sensitive coworkers who themselves wear scents to work or who talk about buying scented products and using them outside of work also contribute to skepticism regarding whether they are sensitive to fragrances and whether their coworkers should have to change their fragrance practices.

Inconsistent complaints about products used by more than one coworker also contribute to skepticism. A few of the Conditional Acceptors mentioned that some of the so-called Fragrance Sensitive people selectively complain about coworkers who use the same products. For example, one person said that she has received complaints about one

of her hair products, but she knows that another coworker also wears that hair product and no one complains about that coworker. Others said that there have been times when they could smell scents coming from more than one person and only one person was complained about. One argued that the complaints seemed to be proportional to the amount that someone likes another person and not due to actual issues with scented products.

Beyond the activities or actions of Fragrance Sensitive coworkers that contribute to skepticism regarding fragrance sensitivity, Conditional Acceptors wonder about how fragrance sensitivity works and question the low levels at which people claim to be affected. They wonder how scents that they cannot even perceive can cause others to have headaches, breathing problems, or other ailments. Some in the Conditional Acceptance group wondered how their Fragrance Sensitive colleagues deal with fragrances in other venues of everyday life. For example,

> I don't doubt that people have reactions to these sorts of things, but again, I think it's situational…. If it's that bad, then why aren't you in a bubble? How can you drive a car? How can you walk outside? … Again, we all understand that it's specific fragrances, but then when we ask these people, what's the specific things…, they don't seem to have an answer for us…. I'm assuming there's some sort of truth in people having actual reactions to fragrance, especially since I've seen reactions on family members as far as cleaning solutions, fabrics, this and that. But then, again, that's a catch-all probably sensitive skin problem. (Not Fragrance Sensitive)

The participant later mentioned that his family member has a visible reaction to laundry detergent that is real because you can see it. Conditional Acceptors resist the idea that low levels of scents from their products might be causing issues, as articulated by one

employee: “when it got down to the clothes soap, or deodorant or whatever, it was like, that seemed to go a little too far….”.

While participants across acceptance categories talked about fragrance sensitivities as allergies, those in the Conditional Acceptance category, along with those in the Possibility category, described skepticism about how this kind of allergy works and who is affected by it. For example, one asked “can you really be allergic to Lysol?” in response to a coworker who complained about the use of a scented restroom air freshener. The two Fragrance Sensitive participants in this category think about fragrance sensitivity as an allergy issue that individuals who have the issue should deal with, like they do and like other allergy sufferers deal with other environmental allergens like pollen or pet dander. They think that Fragrance Sensitive coworkers have a personal responsibility to take care of their own sensitivities by doing things like taking allergy medication. Another way that Conditional Acceptors talked about allergies was to suggest the policy should not be applied if there are no allergic employees in a given department or office.

Some with the Conditional Acceptance frame referred to their own negative experiences with fragrances. For example, one of the participants who has become More Aware of Scents but does not consider himself to be Fragrance Sensitive described a shift in consciousness regarding fragrance sensitivity.

> When you recognize that it is a thing and you watch people have a reaction to it, and then you get in an elevator with a lot of perfume, I start feeling like, “ok, the walls are closing in a little bit, now I can't breathe as good, oh, my god, am I chemically sensitive?” You know, so you start wondering whether you're - and I'll admit, when I got someone who's heavily perfumed, I don't breathe as well. So, I recognize it as a thing, it

> doesn't manifest itself in a way that causes me real problems, but I notice the difference, so I can see where someone that was more sensitive, would have more problems, and if it was being applied universally, then I would agree that those people have real problems, but when I see it not being applied, that it's being used as a – "let me get back at people" then I, sort of wonder whether it's real or not, not saying it's not, but I'm skeptical. (Not Fragrance Sensitive)

He, like others in the Conditional Acceptance group who have witnessed what they view to be inconsistencies in requests made by Fragrance Sensitive colleagues, makes a distinction between fragrance sensitivity claims that seem valid and those that seem like they have been made for other reasons. People use their previous experiences and interactions to assess the veracity of fragrance claims and the extent to which coworkers are indeed sensitive to fragrances. They compare reactions and lack thereof across other interactions and activities in which their coworkers engage. For many of the participants who conditionally accept fragrance sensitivity, apparent inconsistencies in displays of fragrance sensitivity not only make them question the veracity of their coworkers' claims, but also provide support for the assessment that some coworkers are using the "policy as a tool" for other interpersonal issues, a concept that is explored further in Chapter 4.

Factors Contributing to Acceptance of Fragrance Sensitivity as a Health Issue

Factors associated with acceptance of fragrance sensitivity as a health issue include, but are not limited to or exclusively associated with, identifying as being Fragrance Sensitive, having close family or friends who identify as being Fragrance Sensitive, and working in an environment in which there have been few or no

interpersonal conflicts regarding fragrance requests. Some of those who accept fragrance sensitivity as a health issue that should be accommodated in the workplace expressed sentiments along the lines of 'they don't make me sick, but I know that they make others sick'. A number of participants in the Acceptance category talked about fragrance sensitivity as a kind of allergic reaction and think that the policy is a good way to help people with fragrance sensitivities.

In general, participants in the Acceptance category were more likely to have heard about fragrance sensitivity outside of the workplace and are more likely to have had to make accommodations either due to their own sensitivity or due to that of close family members or friends. Among interview participants, three out of the four Not Fragrance Sensitive participants who have close family or friends who are Fragrance Sensitive are in the Acceptance category. They have seen severe reactions among their family and friends and want to be careful to avoid causing problems for others. Participants who heard about the policy and had to change their fragrance practices outside of work prior to the policy were introduced to the idea of fragrance sensitivity by those close to them and have had a longer amount of time to think about fragrance sensitivity than those who first heard about it in through the workplace policy.

More than a decade prior to the implementation of the workplace fragrance policy, one Not Fragrance Sensitive participant had to make accommodations for Fragrance Sensitive family and friends. He views fragrance sensitivity as something that is a constant concern and threat for those who experience it:

> I'm glad I don't have to deal with that, but I can only imagine what life would be like if you had to be constantly. It'd be kind of like where you're in a river on a boat where you know there's hidden rocks, and you can see 'em coming up, you've got to try to maneuver yourself to avoid the danger. So, you imagine yourself now being in a crowd and trying to figure out, "ok, where's the smell coming from? I need to avoid being close to that person because I know I'm going to feel" - it's going to ruin the rest of my day. That'd be a hard thing to have to deal with. (Not Fragrance Sensitive)

The participant likes that his employer is addressing the issue of fragrance sensitivity with a policy, because he said that it is helpful to those who have fragrance sensitivities and increases awareness of the issue.

Another Not Fragrance Sensitive participant had not thought about fragrances as potentially impacting health before she had a friend for whom fragrances triggered migraine headaches.

> Well, at first, she's dramatic anyways, but I thought that she was being just overly dramatic but the more I got to know her, I was like, "my god, these are real and it totally sucks that you have to deal with this." I felt really bad for her. She had 'em really bad. Like she, even when she's pregnant, her doctor would rather keep her on these potentially harmful migraine medicines just because they're so hard for her. They are debilitating. (Not Fragrance Sensitive)

Over time, the participant has become More Aware of Scents since switching her own products. She would not want to impact anyone who might be sensitive to scents so if she uses a product that has a scent, she checks in with her coworkers to see if they can smell it and if it bothers them.

Acceptance does not mean that people gave comprehensive descriptions of fragrance sensitivity and the ways that it can affect people. For example, one participant thinks of fragrances as causing health impacts and, as part of being a "good neighbor" to her coworkers, she asks coworkers for their opinions as to whether the scents of any new personal care products that she tries are appropriate for the workplace. She associates acceptable scents with being "light" and talked about "heavy" perfumes as the kinds of scents that cause problems for people. Part of her accepting fragrance sensitivity and the fragrance policy is that she views them as ways to make the work environment more comfortable for people with fragrance sensitivities.

One difference between the Conditional and Acceptance group is that Not Fragrance Sensitive people in the Acceptance group have not, in general, dealt with strong challenges in their offices due to the fragrance policy. For several of the people in the Acceptance category, the limits to their acceptance have not been tested with challenging fragrance disputes in their offices in the ways that many in the Conditional Acceptance group have. For example, they have not changed some products and then been called out for the scents of their hair products or laundry detergents.

Discussion

Policies that ask employees to change their behaviors to accommodate health needs of other coworkers create opportunities for contestation in the workplace. The findings in this chapter include accounts of the ways that people talk about fragrance sensitivity in terms of their own bodies as well as reactions to others' experiences with

fragrances. Confronted with an issue in their daily work experiences, employees have had to engage with fragrance sensitivity in a way that a majority had not in their lives outside of work. The workplace is a unique venue for discerning dimensions of understandings and contestation as they play out among lay people with various levels of previous exposure to the concepts as well as various levels of expectations for changing their habits and practices. Three key factors that influence the degree to which participants believe that fragrance sensitivity is a health issue that deserves to be accommodated in the workplace are relationships to others who are Fragrance Sensitive; their own preferences and bothersome experiences; and assessments of evidence exhibited by people who claim to be Fragrance Sensitive. Those factors influence compliance, to a certain degree, and how people feel about being asked to comply with the policy.

As an example of health impacts associated with exposures to synthesized chemicals, assessments of fragrance sensitivity have the potential to challenge dominant views of associations between illnesses and environmental exposures toward an "ecological impairment" assessment advocated by Kroll-Smith and Kelley (2008). However, descriptions of fragrance sensitivity among employees in this study show that dominant understandings of biological-based illnesses are transferred to understandings of how fragrances impact individual bodies. In describing the potential negative impacts that fragrances may have on bodies, participants across the spectrum of fragrance sensitivity talked about fragrance sensitivity as being an issue that affects certain individuals in the way that pollens and other environmental triggers cause allergic reactions in some people. Many participants think that fragrances are everywhere and that

experience or contact with them is inevitable. Some, including a few who identify as Fragrance Sensitive, implicitly accept that fragrances in scented products are benign in the same way that pollen and other allergens are benign to most people and only burdensome to those who are sensitive to them.

The parallels between scents and allergies are based in part on understandings of scent as naturalized and inescapable– it would be futile for people with allergies to try to avoid exposures to pollens and other environmental triggers that are dissipated throughout the air. The same case could be made for people trying to avoid exposures to fragrances. Like pollens, scents are everywhere and come from different sources. It is this inescapable quality that makes some participants worry that fragrance sensitivities might become more widespread if people are not exposed to them regularly at home and in the workplace. For example, a number of participants who are More Aware of Scents view their increased scent perceptions as problematic because they notice and are sometimes struck by "normal" levels of ambient scents that previously went unnoticed. They do not identify as Fragrance Sensitive or say that they have negative reactions to fragrances though some of them described isolated incidents of feeling "overwhelmed" and wondering if they were actually becoming sensitive to fragrances.

Though the use of fragrances has been problematized to some degree, an allergy framework for understanding fragrance sensitivity consistent with dominant models of understanding environmental agents in the body helps to keep fragrance chemicals themselves in a black box (Latour, 1993) for a majority of participants. For a number of participants, the source of blame and responsibility for mitigating issues has been directed at either the individual who wears scents that cause reactions or at the people

who are experiencing the reactions and are not doing anything to mitigate their reactions such as taking allergy medication. To be clear, in instances of severe reactions to fragrances, such as obvious breathing difficulties, participants placed responsibility squarely on the fragrance user to stop wearing certain scents. A majority of participants had not considered or thought about fragrances themselves as having potentially negative impacts on human health and indoor air quality in the way that things like building materials, automobile exhaust, or cigarette smoke do. A few said that industry should make it easier for people to purchase fragrance-free versions of products but the disputes remained largely over either scent-wearing practices or health claims of fragrance sensitivity.

For many, the implicit acceptance of fragrance chemicals as non-toxic or benign means that the terms of debate over fragrance sensitivity largely revolve around Fragrance Sensitive employees' assertions that scented products used by their coworkers are causing them to have adverse health reactions and scent-wearing employees' assessments of the existence and boundaries of those impacts. Employees gather evidence based on observations of the behaviors of Fragrance Sensitive coworkers and perceptions of levels of scents connected with purported breaches of the fragrance policy. Unlike well-documented contested illness disputes in which those responsible for pollution use tools of science such as ambiguous study results and support from the medical community to cast doubts on claims of harm from injured groups (Shriver et al., 1998; Brown et al., 2001; Shriver et al., 2002), the debates over the experiences of illness and responsibility for causing discomfort or harm in the workplace happen among lay coworkers. In this case, fragrance users are in the position of polluter whose actions or

lack of actions, have impacts on the health and well-being of their Fragrance Sensitive colleagues and on air quality in the workplace. Viewing fragrances as allergens that are normalized and benign to most people helps to prevent participants from thinking about them more broadly in terms of air quality and potential impacts on health for employees across the organization.

Though understandings of fragrances as potential allergens may limit the potential of fragrance sensitivity debates to lead to broader understandings and actions regarding synthetic chemicals and health, framing the issue in line with dominant views of how bodies interact with the environment (Kroll-Smith & Kelley, 2008) and the dominant epidemiological paradigm (Brown, 2007) has some positive implications for implementation of and compliance with fragrance restrictions in the workplace. Understanding fragrances as allergens provides an understandable rationale for what is happening to Fragrance Sensitive people in the presence of fragrances. People who are asked to change their fragrance-wearing practices generally comply, although there have been a few intractable disputes within the workplace. Framing fragrance sensitivity as an allergy helps in the practical sense in providing an understandable rationale with which Not Fragrance Sensitive people can connect, particularly in cases where there are obvious physical reactions for the Fragrance Sensitive coworker. It is a frame that has helped induce people to change their behaviors.

However, understanding fragrances as allergens also provides support for resistance to change. For some, the allergy frame of fragrance sensitivity is a justification for limits to the policy and the degree to which fragrance use should be restricted in workplaces because they place responsibility on the allergic individual to find ways to

manage his/her reactions to fragrances. Some participants set limits and resisted changing scented products because they mentioned that people with fragrance issues no doubt encounter fragrances in other parts of their life and they find ways to deal with those exposures and live their lives. Environmental allergens such as pollen are everywhere and people who have allergies have to find ways to mitigate their reactions. There is something taken-for-granted in the way that people think about scents as a normal characteristic of products that are used in personal care and laundry routines. As described in Chapter 2, some participants could not tell whether their products were scented – particularly in cases where they used the "original scent" of a product. Scents are normalized and naturalized for many and it is the abnormal, anomalous body that reacts negatively to the scents in products.

Chapter 4: Impacts of Employee Assessments on the Implementation of Workplace Fragrance Restrictions

Connecting normative expectations for olfactory emissions at work and understandings of potential health impacts of fragranced products, this chapter uses a framework of lay assessments to analyze employee approaches to deciding whether and the extent to which to adhere to fragrance restrictions in the workplace. The fragrance policy asks employees to change their practices due to impacts on a subset of fellow employees who react to the kinds of fragrance exposures that are normalized – those that do not exemplify moral breaches (Low 2006) of appropriate scent behaviors - in the workplace context. Findings show that employee assessments and corresponding responses are influenced by proximity to and interpersonal relationships with people who are Fragrance Sensitive as well as employees' own scent perceptions. This work contributes to contested illness and environmental health literatures by examining lay responses to concerns about how practices impact the health of others. Previous research demonstrates how people with chemical sensitivities can be negatively impacted by others' resistance to modifying everyday life practices, (Kroll-Smith & Floyd, 1997; Shriver & Waskul, 2006; Lipson, 2004), but research has not examined assessments of those who have been asked to make changes. The results in this chapter shed light on the kinds of impacts that employees count as valid or legitimate evidence for fragrance claims and the kinds of assessments that lead people to reject requests for change. Results show that employees have made substantive changes to their fragrance practices as well as set limits to the kinds of changes that they will make.

Literature Review

At the case study site, the policy requests that employees change their practices to protect the health of their coworkers, so it is not surprising that, as discussed in Chapter 3, many participants think about fragrance sensitivity as an individual health issue. Individualization and personal responsibility are common themes in research on contamination, environment, and health. Framings of illnesses emphasize individual and lifestyle factors in the onset of environmentally-mediated illness while downplaying or ignoring environmental factors (Brown et al., 2001; Brown, 2007; Davis & Webster, 2002). MacKendrick (2010) argued that increases in sources of contamination make it harder to place blame on polluters and easier to call on individuals to make changes and take responsibility for protecting themselves. Researchers and environmental justice advocates have called for a problem frame that moves away from biomedical individualized explanations for environmentally-induced conditions such as asthma toward a frame that supports the environmental, social, and economic root causes of illness (Loh & Sugerman-Brozan, 2002; Brown, 2007; Conrad & Barker, 2010).

Fragrance policies ask employees to change their practices to try to protect the individual health of others. It is important to know how employees understand and assess claims of harm in the process of deciding whether to make changes to their practices. Research on lay assessments has focused on how people view potential impacts of activities or substances that have been deemed risky to their own health (e.g. O'Sullivan and Stakelum, 2004; Heikkinen et al., 2010; Burton-Jeangros, 2011). For example, O'Sullivan and Stakelum (2004) found that "lay formulations of risk" are socially embedded and influenced by whether people enjoy engaging in an activity and whether

they believe that the benefits outweigh the costs or potential risks associated with it. Heikkinen and colleagues (2010) examined the role of lay epidemiology (Davison, Smith, & Frankel, 1991; Frankel, Davison, & Smith, 1991) in the way that smokers process and assess hegemonic public health messages about the risks of smoking. The participants in their study use evidence from their own lives to contradict public health messages about smoking in order to make sense of and justify their own "unhealthy" behaviors. Participants' own experience of lack of harm from smoking as well as those of peers and public figures serve as "counter-evidence" that is used to challenge claims about health hazards associated with smoking.

Lay assessments also impact how people understand and make sense of broader environmental health risks (Scammell et al., 2009; Collins, 2010). For example, Scammell and colleagues (2009) found that the "tangible evidence" lay people gather through sensory experiences impacts the way that they view scientific knowledge generated through environmental health studies. They found variations in the extent to which different groups were skeptical of the results of such studies when those results contradicted their own sensory experiences and note that there is still a lot to learn about how people use tangible evidence to make sense of environmental health outcomes (Scammell et al., 2009).

One gap in the literature on contested illness is an analysis of lay actors' assessments and actions regarding accommodation requests from those who are chemically sensitive. In general, such requests ask others to modify their use of products that many uncritically accept as normal and unproblematic in everyday life (Kroll-Smith & Floyd, 1997; Lipson, 2004). Studies have explored the perspectives of those who are

chemically sensitive about what they experience when others will not change their practices to accommodate health requests (J. S. Kroll-Smith & Floyd, 1997; Larsson & Mårtensson, 2009; Lipson, 2004; Shriver & Waskul, 2006; Söderholm et al., 2011). There is a lack of research from the perspectives of those who are asked to change and their rationales for resisting change. Individualization of environmental contamination issues has been explored in terms of how people try to protect themselves (DuPuis, 2002; Szasz, 2007) but in this case, employees who do not identify as Fragrance Sensitive are being asked to change their practices to protect others from experiencing negative reactions. Addressing some of the gaps in the literature, this chapter focuses on the following two questions: *What are the mechanisms that impact lay assessments and corresponding actions related to fragrance restrictions in the workplace?* And *in what ways does the conceptualization of fragrance sensitivity as an individual health issue impact the implementation of the fragrance policy?*

The analysis incorporates and extends the concept of denial that has been applied to analyses of responses and resistance to claims of environmental harms. The following aspects of denial help to explain the formation of lay assessments that contribute to different levels of adherence to fragrance restrictions: attention and relevance (Zerubavel, 2006) and dismissal of claims and inaction related to environmental threats (Opotow & Weiss, 2000; Shriver & Webb, 2009; Auyero & Swistun, 2009; Norgaard, 2011). Zerubavel's (2006) model for the social organization of denial says that social norms help to structure the focus of attention to ignore irrelevant information. Zerubavel (2006) contends that "there are cultural and social underpinnings for attention" (18) which shift over time. Rayner (2012) argues that without the kinds of "perceptual filters" that are

culturally and socially defined, we would be overwhelmed by sensory stimuli. By asking employees to shift their practices and consider the impacts of fragrance use on their fellow coworkers, the fragrance policy asks employees to focus their attention to something that, for many, was previously just another part of the background of the office context. A complicating factor in asking employees to avoid using discernable scented products at work is that there are differences in physiological perceptions of scents, which to some degree are socially and culturally mediated (Riach & Warren, 2015). "Olfactory adaptation" or "odor fatigue" are sensory processes that refer to the way that "continued or repeated exposure to any odor stimulus will result in a decrease in the perceived intensity and detectability of that odor" (Dalton 2000: 5). Denial in the form of inattention to the presence of fragrances on one's body or in a space likely has physiological as well as social dimensions.

Denial also involves processes of rejecting claims of harm and potential actions based on those claims. Opotow and Weiss (2000) demonstrate how denial of outcome severity and denial of self-involvement are often-employed strategies for rejecting environmental claims of harm. On an institutional level, denial has been a powerful tool in environmental conflicts that has helped producers to cast doubt on connections between contaminants in the environment and human health outcomes in order to protect their own economic interests (Auyero & Swistun, 2009; Cable, Shriver, & Mix 2008; Phillimore et al., 2000; Shriver & Webb, 2009). For example, corporate actors, with institutional support from government agencies, refused to acknowledge residents' claims of links between their health problems and the visible carbon black dust emanating from the local manufacturing facility that blanketed their homes (Shriver & Webb, 2009).

According to Auyero and Swistun (2009), denial of links between corporate activity and residents' health problems contributed to the development of "toxic uncertainty," which is doubt among those experiencing harms which then contributes to repression of consciousness and inaction in the face of toxic threats. In an analysis of climate denial, Norgaard (2011) argues that the tools that people in privileged positions use to help them maintain denial help to reinforce social inequality through inaction. She contends that denial in the form of apathy is also evidence that some people may be unsure or overwhelmed by the scope of environmental harms and uncertainty about what they can do to make an impact so they fail to respond. At the level of the workplace, fragrance users are in the position of polluters who have been asked to change their practices for the benefit of others.

Findings

> *For the most part, people that I immediately work with try to be sure they don't wear fragrances but we did have one instance where a person didn't realize her lotion she used at home was very fragrant. We were able to talk to her and she was not very offended and she quit using the product. On the other hand, the whole building is supposed to be fragrance free and every day someone is wearing some strong cologne or perfume and it's nauseating. It would be nice if it were enforced by all. (Fragrance Sensitive)*

> *I get why there's a policy--because some people slather it on. But, I will not go out of my way to avoid scented products. As for cologne, I use a small amount and no one's ever complained. Moreover, a third of my life is spent at work and I resent [the organization] regulating what I put upon my person. (Not Fragrance Sensitive)*

The two quotes that open this section allude to some of the challenges and successes in implementing the fragrance policy. The findings of this chapter, organized into the following three sections, explore the factors and rationales that impact the volume of fragrances emitted into the workplace under a voluntary policy that is framed, and predominantly understood as, related to individual employee health outcomes: overview of implementation, individualization and support for change, and individualization and challenges to change.

Throughout the chapter, the data show that there have been tangible changes and improvements for many Fragrance Sensitive people, as well as limits to change that are related to employees' lay assessments of potential harms of fragranced products and the degree to which their own practices might be contributing to harm for their fellow coworkers. Perceptions, awareness, and interpretations of the potential for fragrances to negatively impact individuals with fragrance sensitivities influence employee behaviors and levels of implementation of fragrance restrictions.

Overview of Implementation

This overview presents a general picture of scent practices and responses to the fragrance policy. It includes data on scented product use, the extent of fragrance restrictions across the organization, and experiences of the Fragrance Sensitive. Some of the data are presented by Fragrance Sensitive status: Fragrance Sensitive and Not Fragrance Sensitive. The next two sections show how variations in reactions to the policy flow from a predominant understanding of fragrance sensitivity as an individual health issue rather than an indoor air quality or more generalized environmental health

issue. In general, the policy requests, but does not require, employees to avoid workday use of products which are mainly designed for the purpose of emitting scents, such as perfumes and colognes, and "strongly" scented personal care products. With a voluntary policy framed as protection for employees who have negative health reactions to fragrances, compliance is not as straightforward as counting employees who continue to wear perfume or cologne to work.

All interview participants and 97% of survey participants are aware that the organization has a fragrance policy. However, there is wide variation in experiences with and understandings of the fragrance policy across the organization. At one end of the spectrum are employees with direct observations of coworkers who have had severe reactions to fragrances at work. On the other end are employees for whom the idea of fragrance sensitivity and requests to change fragrance practices remain hypothetical. In between, there are varying degrees of experiences with less-obvious fragrance reactions and fragrance complaints. In general, employees in departments with stricter enforcement due to the presence of known Fragrance Sensitive colleagues are more aware of the policy and have been impacted by it more than those in departments where fragrances have not been as much of an issue or an issue at all.

Expectations for the extent to which employees should refrain from emitting product scents in the workplace vary by department and are influenced by the history of fragrance complaints in that office, the presence or absence of Fragrance Sensitive coworkers, and levels of support from supervisors. Asked to rate fragrance restrictions in their departments on a seven-point scale, participants selected all points along the scale, as shown in Chart 4.1. Three-quarters (73%) of survey participants rated the restrictions

in their offices at the midpoint or above on the scale. At the end points, 14% of participants said that fragrances are "not at all" restricted while 32% of respondents said that fragrances are "completely" restricted in their departments[1].

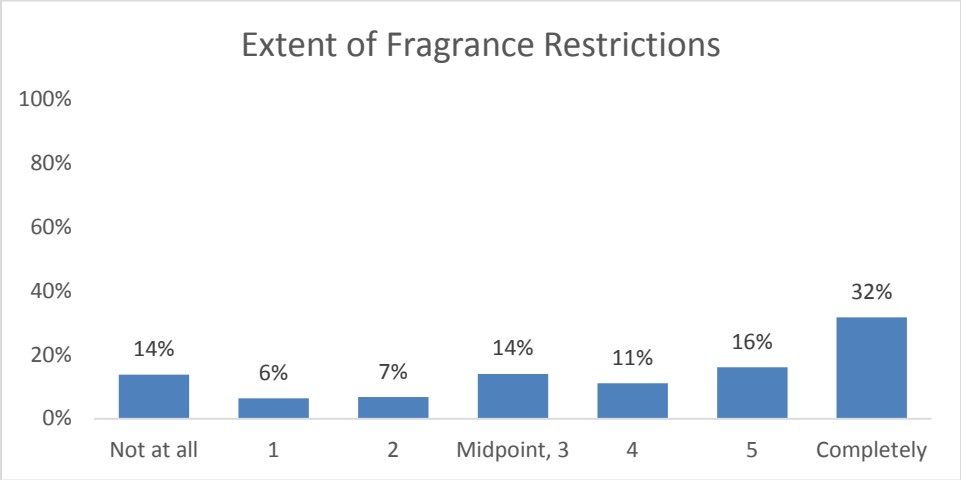


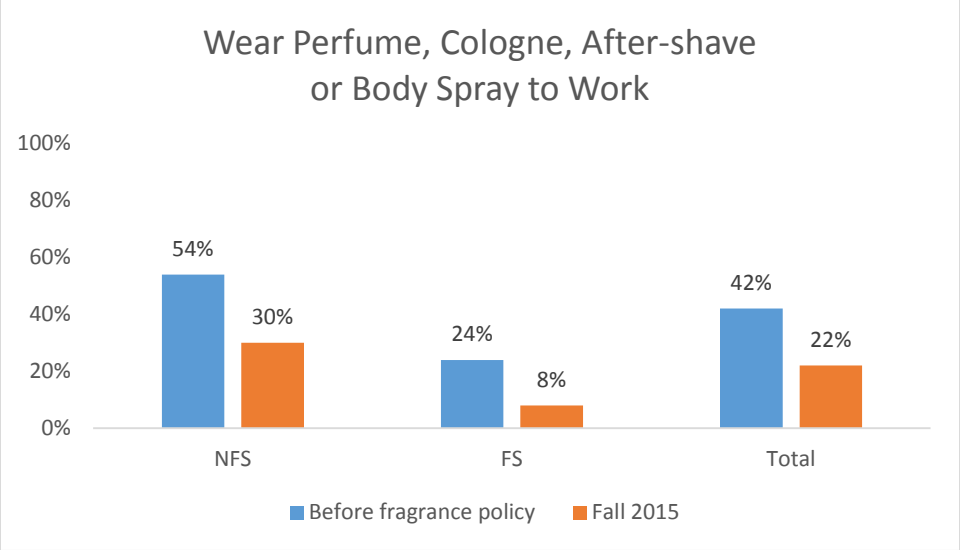
Chart 4.1: Participant reports of the degree to which fragrances are restricted in their offices

According to self-reports, there have been substantial declines in the proportion of participants who wear perfume or cologne to work since the start of the fragrance policy. As shown in Chart 4.2, among survey respondents, the overall rate of wearing perfume or cologne to work at least one day per week has been almost cut in half - from 42% to 22% - since the fragrance policy was implemented. By subgroup, 30% of Not Fragrance Sensitive and 8% of Fragrance Sensitive participants report that they continue to wear perfume or cologne to work at least one day per week. In total, just over one-third (35%) of participants reported that they have changed or stopped using one or more scented

[1] The distribution of responses along the extent of restrictions spectrum was similar for Fragrance Sensitive and Not Fragrance Sensitive participants.

products as a result of the fragrance policy (36% Not Fragrance Sensitive and 33% Fragrance Sensitive).

Chart 4.2: Rates of wearing scented products before and after fragrance policy implementation



As mentioned in earlier chapters, fragranced products include a wide range of personal care and laundry products as well as perfumes, colognes, and body sprays that may continue to emit scents throughout the day. The wide range of scented products as well as differences in perceptions of scents present challenges for measuring and conceptualizing policy implementation. Whether someone has changed their products or practices does not necessarily indicate the level or degree to which a participant is fragrance-free or the degree to which their scents are noticed by coworkers. While many interview respondents reported that the amount of ambient scents from coworkers' scented products decreased significantly since the implementation of the fragrance

policy, overall, 63% of survey participants said that they can smell coworkers' fragrances or scented products, on average, at least once per week, as shown in Table 4.1. Fragrance Sensitive participants reported that they smelled fragrances emitting from fellow employees at least once per week at a rate that is 15 percentage points higher than that of Not Fragrance Sensitive employees. Given the way that the policy is implemented, this does not necessarily reveal the extent of non-compliance, but it does speak to variations or limits to the degree to which employees are scent-free. It also is not an assessment of the degree to which discernable scents are problematic.

Table 4.1: Number of days per week that employees smell coworkers' scented products in their offices

	Not Fragrance Sensitive	Fragrance Sensitive	Total
Zero days	43%	28%	37%
1 or more days	57%	72%	63%

For those who are bothered by scents in the workplace, the policy has made a difference in two ways. First, it has reduced the overall amount of scents worn by coworkers, in particular, perfumes, colognes, and body sprays. Second, it has made it easier to make requests for coworkers to change their practices because there is a policy to back up the request and people can ask their managers to ask coworkers to make the changes. Many Fragrance Sensitive employees appreciate the reduction in the amount of scents that they smell in the office since the fragrance policy was passed.

> In the past, I had co-workers who drenched themselves in cologne or perfume that triggered headaches and nausea for me. With the implementation of the policy I've only had that problem when non-employee guests come to visit. (Fragrance Sensitive)

While the policy is making a difference and has improved the work lives of many people in the organization, there are limits to implementation. Of the participants who identified as Fragrance Sensitive in the survey, one-fifth (22%) have not had any negative reactions as a result of coworkers' scented products while 32% have said that a coworker triggered a Fragrance Sensitive response in the month prior to taking the survey. In open-ended responses, many of the people who are Fragrance Sensitive said that coworkers in their departments generally comply with the policy. Study participants also shared a few examples of coworkers (and supervisors) who, after being confronted about their fragrance use, either completely refused to make changes or only made limited changes in their practices. Discussions of fragrance breaches more often refer to employees in other units, visitors to the organization, and lingering scents in elevators and hallways.

There are both tangible changes and limits to implementation via an individual health status argument. The changes that many participants made in decreasing their use of fragranced products show that the individualized rationale for the policy has been effective in encouraging many people to change their practices. Approximately one-third of participants have reduced their use of fragrances and the overall rate of participants who wear perfume or cologne to work at least once per week decreased by about half. The one-third of Fragrance Sensitive participants who mentioned having reactions to

colleagues' fragrances highlights limits to the diffusion of the policy. Changes and limits to change are explored in the next two findings sections.

Individualization and Support for Change

The policy was implemented out of concern for how fragrances may impact employees with fragrance sensitivities in the workplace. The underlying rationale and accompanying individual health message has been effective in encouraging many employees to change their scent practices at work in part because the allergy explanation for negative fragrance reactions provides an understandable rationale that falls within a common medical disorder. This section includes an assessment of the ways that an individualized health argument has encouraged employees to abide by the fragrance policy. Among the underlying rationales that employees use to support adherence to the policy, and in particular, why they have made changes in light of the policy, two flow from an individualized health status understanding of fragrance impacts. The first is modifying practices due to the existence of known Fragrance Sensitive coworkers in an office, particularly those with obvious or severe reactions to fragranced products. The other is a "good neighbor" orientation under which participants maintain their already low use of scented products or make changes due to the potential that they may encounter colleagues with sensitivities to fragrances including those who may not have spoken up or may not have identified themselves as Fragrance Sensitive.

Presence of a Fragrance Sensitive coworker in an office provides evidence to support changes

When there are employees who are sensitive to scents in a department, the likelihood that employees are expected to change their scent habits and that they have made changes to their practices is higher. Both interview and survey data show that reductions in the use of scented products happen to higher degrees in offices where there are known Fragrance Sensitive coworkers. For example, among survey respondents, shown in Table 4.2, half (48%) who reported that they have a Fragrance Sensitive coworker in their office reported at least one product change due to the fragrance policy compared with a quarter (25%) of participants in offices where there are no Fragrance Sensitive coworkers. There is a 30 percentage point difference in the rate of wearing perfume or cologne to work at least one day per week among those who have Fragrance Sensitive coworkers and those who do not.

Table 4.2: Changes to products and frequency of wearing perfume or cologne in offices with and without Fragrance Sensitive respondents

Fragrance Sensitive coworkers in one's office	Changed at least one product due to policy	Wears perfume or cologne to work
Yes	48%	13%
Unsure	29%	22%
No	25%	43%

There are some characteristics of Fragrance Sensitive participants that make other employees more sympathetic in general toward their requests. Fragrance Sensitive employees with obvious and severe reactions to fragrances present visible evidence that

encourages employees to change their practices. Clear connections between the presence of scented products that many people in an office would deem obvious or strong and negative reactions in a Fragrance Sensitive coworker lend credibility to fragrance claims. Requests for change that originate from coworkers who do not complain about a lot of other things and who are well-liked and integrated into their departments are also met with more empathy than requests from employees who seem to complain a lot and who have other issues with their coworkers.

The presence of a Fragrance Sensitive coworker who exhibits visible signs of distress due to fragrance exposures seems to provide the clearest form of evidence that participants should make changes to their practices. People view the inconvenience in changing their practices to accommodate those who experience such obvious distress as worth it because they have seen reductions in their coworkers' reactions as a result. Employees who make changes for obviously affected Fragrance Sensitive coworkers also think of it as being the right thing to do. There is an acceptance in the face of severe reactions that is not there to the same extent in the case of less severe reactions, a theme that is explored later in the findings section.

Some employees and supervisors had experiences with disputes over fragrance use prior to the implementation of the fragrance policy. Having a rationale to explain why employees are making fragrance requests has reduced some friction because people understand that the fragrances are causing issues, not just someone trying to be difficult. For example, one supervisor credits the fragrance-free policy with reducing the amount of scents in the office and reducing friction among employees.

> The policy, in my opinion, decreased the friction between employees because it was, you know, the allergies. Some people thought that it was just somebody trying to get attention, and in some instances that might have been true, but after the policy, you could either adhere to it or be disciplined for it, so it kind of took away all of the fighting between people …. Once more awareness built up, people began to really understand it and they could understand that it could irritate a person's throat and really make it difficult for them. People came in line. So, I believe the policy is effective even though I love the smell of perfume. (Not Fragrance Sensitive)

The health rationale, interpreted as allergies, provides justification and support for requests for employees to make changes to their practices.

In addition to reducing the amount and prevalence of scents that coworkers emit in the workplace, many participants said that the fragrance policy has made it easier to speak to coworkers in the instances where scent issues arise. Fragrance Sensitive participants noted that their colleagues have reduced their use of scented products and, in general, are more responsive to requests for changes to their practices. For example:

> I'm very glad my workplace has a policy. I notice strong scents less and feel more confident speaking up if someone wears a strong scent. (Fragrance Sensitive)

> I have had good experiences with talking to co-workers who use scented cleaning products that trigger headaches and other allergic reactions (sneezing, coughing, etc.), and my boss has my back. (Fragrance Sensitive)

The policy legitimizes impacts on the individual health of workers so that employees with fragrance sensitivities can speak up and others respond. In general, the increase in awareness of fragrance as an issue that impacts individual health has made it easier for employees to have conversations with their coworkers and for their coworkers to respond.

"Good neighbor" orientation

A main reason for abiding by the policy in the absence of known fragrance sensitive coworkers in an office is that participants do not want to affect the health of their fellow coworkers who might be Fragrance Sensitive. Borrowing language from a couple of participants, this "good neighbor" or community orientation is undergirded by the rationale that fragrance negatively affects certain individuals. Participants with this orientation accept fragrance sensitivity as a health issue that deserves to be accommodated in the workplace, a concept that was described in Chapter 3. They think that it is good to follow the policy because they may encounter people who are affected by fragrances and they do not want their practices to negatively impact those employees. Several Not Fragrance Sensitive employees with this orientation have encountered Fragrance Sensitive people outside of the workplace and have had to make accommodations for family and friends, so their understanding of fragrance sensitivity comes from experiences outside of work. Having a good neighbor orientation does not mean that employees have made changes to their practices: some already used unscented or low-fragranced options prior to the implementation of the fragrance policy. Those who follow this orientation do not need to know whether there are actually Fragrance Sensitive employees in their offices in order to make changes. As we will see in the next section, employees with a different disposition require a higher burden of proof and specific examples to support making changes to their fragrance practices.

Individualization and Challenges to Change

While an individual health rationale has led to changes in the workplace, it also supports limitations and boundaries to changing scent practices in a number of different ways, which are organized into the following three sections: social and physical aspects of scent perception, modifications for specific individuals, and power dynamics and questions of legitimacy. The analysis focuses on the kinds of evidence that employees use as they interpret the need for and negotiate potential changes to their practices in light of an individualized health frame. These sections highlight the assessments that underlie limits to policy implementation. Assessments tap into evidence generated through participants' experiences with fragrances and Fragrance Sensitive individuals. Interactions with coworkers who experience fragrance sensitivity as well as silence on the part of Fragrance Sensitive coworkers contribute to assessments that employees make in determining whether and the degree to which they should be fragrance-free at work. Skepticism in engaging with claims of harm associated with individual exposures to fragrances contributes to assessments that limit changes to practices. Processes of denial of outcome severity and denial of self-involvement (Opotow & Weiss, 2000) help to relegate fragrance issues into irrelevance (Zerubavel, 2006) for a segment of employees.

Social and physical aspects of scent perception

There are social and physical aspects of engaging with scents that influence the degree to which individuals perceive scents and, in turn, assess scents as being potentially problematic and in need of modification or change. Levels of scent perception are

influenced by both social factors such as which kinds of scents are normalized or acceptable in given contexts, as described in Chapter 2, and physical factors such as one's ability to discern various scents. Limits to scent perception present major and overarching challenges to implementation. Scents that may be very obvious and cause issues for some people may not even be perceived by others. When individuals do not realize that their scented products are discernable by others, they have little to no incentive to make changes to their practices.

Median survey results show that 10% of the personal care and laundry products used by Fragrance Sensitive employees and 50% of products used by Not Fragrance Sensitive employees are scented. Several Not Fragrance Sensitive participants exhibited a lack of awareness that scents from fragranced products might continue to be emitted and therefore perceptible long after they have been used. People often forget about their own scents because their sense of smell stops paying attention – that is, wearers stop being able to smell scents on their own bodies- soon after they use a product. This phenomenon has been referred to as "odor fatigue" (Dalton, 2000). A number of employees, particularly those who enjoy using scented products, expressed sentiments consistent with odor fatigue. Many talked about how the scents from their own products were not perceptible to themselves once they arrived at work. Others noted how their scents faded throughout the day. This type of inability to perceive scents after a given time is a key part of how inattention and denial (Zerubavel, 2006) limit awareness of potential scent breaches. This means that employees may not realize that their products continue to emit scents all day long because they stop being able to perceive them soon after they use them.

In terms of scent perception, another main reason for continuing to use fragranced products is the assessment that scents from one's products could not possibly be heavy or strong enough to cause reactions or issues for people. This connects back to employees' understandings of moral breaches (Low, 2006) of scent practices and the desire to distance themselves from such breaches. For example, one Not Fragrance Sensitive employee refuses to be completely fragrance-free because he understands the policy as banning "overbearing" fragrances and his products do not fall under that category. Another, who uses a scented laundry detergent that I could smell during the interview, justifies the use of fragranced products by saying that they are not bothering others, that his products give off a "very light smell" that is "nowhere near perfume". This sentiment was echoed by others who contend that their products only have a "light" scent, that "there's like no scent to it, really", or that the scent dissipates by the time the person goes to work. Participants making these assessments based on scent perceptions assert that their fragranced products are not emitting problematic scents into the workplace.

Some personal care products or laundry products can emit more scents and stronger scents than perfume or cologne. Products that are scented but have other functions such as hand and body lotions, hair care, and laundry products have been the sources of disputes among coworkers. Given that fewer than 10% of all survey participants reported changing each type of product listed in the previous sentence, it means that such products have only been problematized to a limited extent in this workplace. Table 4.3 shows the proportion of respondents who think that each category of product should be included in the fragrance policy. The gap in terms of the proportion of Not Fragrance Sensitive and Fragrance Sensitive employees who think these products

should be included in the policy ranges from 15 to 38 percentage points for each category. For example, 77% of Fragrance Sensitive participants think that "body lotions and sprays" should be covered under the fragrance policy while only 39% of Not Fragrance Sensitive participants agree.

Table 4.3: Proportions of employees who think that each of the following should be included under the fragrance policy

	Not Fragrance Sensitive	Fragrance Sensitive	Total
Perfume, cologne or aftershave	61%	94%	74%
Body lotions or sprays	39%	77%	53%
Air fresheners	38%	75%	52%
Cleaning products used at your desk	19%	52%	31%
Hair care products	18%	45%	28%
Shower gels/body washes	10%	34%	18%
Deodorants	10%	28%	17%
Laundry detergent, fabric softener, and/or dryer sheets	9%	31%	17%
Hand sanitizer	9%	24%	14%
Hand soaps	8%	25%	14%
None of the Above	29%	2%	19%

The significant differences between the rates that Fragrance Sensitive and Not Fragrance Sensitive participants think these kinds of products should be restricted under the fragrance policy are related to differences in perceptions of scents, in particular, understandings of which products are emitted into the workplace and whether they have the potential to cause problems for Fragrance Sensitive individuals. This data speaks to

how people perceive scents and shows that scents that cause concern for some may remain hidden for others. Of note is that the proportion of Fragrance Sensitive participants is below 50% for many of the personal care and laundry product categories for which fragrances play a secondary role in product formulations, which suggest that scents from these kinds of products might also not be problematic for a significant portion of those who identify as Fragrance Sensitive.

Often, people are unaware that their products are giving off a discernable scent at work until someone points it out to them. There were several examples of Not Fragrance Sensitive participants having been told that they "smell nice" as a way for supervisors or other employees to let them know that they were emitting a fragrance. For example:

> One of our past directors - I had gone into his office one time and he said, "oh, my, you smell nice." And I'm like - I couldn't quite figure that out. I don't know whether, maybe I had put a little too much fabric softener in my wash cycle…. I still use my fabric softener, but I don't use very much, just enough to keep the static electricity down. But, yeah, it's very interesting to stop and think about how many things are actually fragranced. (Not Fragrance Sensitive)

It took the participant some time to figure out where the scent was coming from because she had stopped wearing perfume to work by that time. These kinds of encounters raised awareness that employees emit scents from their personal care or laundry products into the workplace. However, being more aware that their products were emitting scents throughout the work day did not mean that participants necessarily made changes to their products.

Due to uncertainty surrounding the degree to which people can smell scents emanating from their own bodies, employees who use scented products may ask others if they can smell their scents as a way to understand whether they are giving off too much of a scent. Employees may also check their scented products with the Fragrance Sensitive people in their departments – if the products are ok for the Fragrance Sensitive people, then the extrapolation is that they are ok for everyone else. Some assume that their products are not bothering others if no one has said anything to them. They continue to use such scented products and think that since no one has complained or explicitly stated that they are bothered by the scents that they do not have to change their practices.

> I love perfume. It calms me and brightens my mood. I use it very sparingly and always check in with coworkers to see if they can smell it. They always say they can't even detect it! (Not Fragrance Sensitive)

Limits to supervisors' discernment of scented products have implications for implementation of the policy. There have been examples of employees who invoke the policy and then their respective supervisors say that they cannot smell the scents coming from the allegedly scented employees. Supervisors asked questions along the lines of "How can I enforce something that I cannot smell?". One talked about setting a limit for enforcement as being able to smell a scent from a "normal conversational distance". These limits to supervisor perceptions of scents pose challenges for enforcement and for the legitimacy of fragrance complaints. Scent perceptions impact the kind of physical evidence that employees have to work with, which has major implications for assessments of modifications for Fragrance Sensitive colleagues.

Modifying fragrance practices for specific individuals

Consistent with the individual health rationale for the policy, a significant segment of survey participants would prefer it if fragrance restrictions were implemented on a case-by-case basis in offices or departments where employees describe being bothered by specific scents. In this section, two kinds of support for an as-needed policy are examined: absence of known Fragrance Sensitive coworkers in a given department and making modifications on an as-needed basis for specific coworkers in a given area. The examples show that an individual health frame is used to support calls for (and actions toward) as-needed implementation of fragrance restrictions in cases where there are known Fragrance Sensitive coworkers and in offices where there are not.

The absence of known Fragrance Sensitive coworkers in an area is used as a common justification for continued use of scented products. This poses a challenge to encouraging changes to practices because a substantial proportion of respondents do not know whether they have coworkers with fragrance sensitivities in their offices. A total of 55% of survey respondents - 48% of Fragrance Sensitive and 58% of Not Fragrance Sensitive – were unsure as to whether there were any Fragrance Sensitive employees in their departments. In addition, 12% of participants reported that there were no Fragrance Sensitive employees in their areas. Without known Fragrance Sensitive coworkers to request changes, many employees continue to use scented products and say that they would change and that employees should change their practices if there is someone who is known to be sensitive in an area. For the employees making as-needed arguments, issues should be dealt with on a case-by-case basis.

> Any serious issues can be dealt with in a case-by-case basis--we don't need [an organization]-wide policy. I feel bad for people with asthma and chemical sensitivities. When somebody boards an airplane and is wearing a lot of cologne I cannot believe how thoughtless and selfish they are being polluting everybody's air. But as long as nobody is bothering anybody around them I see no need to have a 100% ban. If your scents are bothering someone, then it is appropriate to ban it in that area. (Not Fragrance Sensitive)

In this assessment, fragrances should be restricted in a given area if they are bothersome in that particular office or area. Unless someone speaks up, and presumably can identify the particular scented products that are bothersome, then restrictions should be limited.

In expressing concern or dislike over the policy, a number of people talked about how they thought that the policy goes too far and that it should not cover things like laundry detergent and personal care products that employees use at home. For example:

> If I knew one of my co-workers were sensitive, then I would try to not use whatever fragrance is a problem for them but the outright ban seems extreme. If a policy is needed then I would say it should just be for perfume and cologne as those tend to be stronger, more chemical smells, and I think it is impractical to ban all scents since so many products have a smell. I don't think people should have to change all the products that their entire family uses to unscented just because they may come into contact with someone who may be sensitive. (Not Fragrance Sensitive)

In this estimation, potential encounters with Fragrance Sensitive people are not enough to justify the cost, inconvenience, and hassle associated with widespread changes to someone's fragranced product practices. Employees who made this argument would be willing to make changes necessary for a Fragrance Sensitive coworker. In the absence of

such coworkers, the fragrance policy is viewed as a non-issue that does not warrant extensive changes in personal care products.

The two previous quotes suggest that even employees who call for an as-needed policy are amenable to some general restrictions on scented products. Many calling for an as-needed policy said that the strength and volume of scents should determine scent restrictions. Often, participants calling for restrictions based on the volume of scents think not in terms of fragrance sensitivity but more about excessive or "bathing in it" levels of scents that would be obvious and perhaps bothersome to the presumed average person. As explored in Chapter 2, many are against overbearing or too strong scents in the workplace and argue that instead of a blanket policy, managers should just deal with overuse when the problem arises.

> I feel employees should be able to wear lightly scented products if it does not negatively impact individuals working around them. I understand there are some who are allergic to fragrance, but that may not mean every person in every department should have to stop wearing their personal care products across the board if that does not even impact the person with allergies, since they do not directly work around them. I feel the policies are too broad and not fair. (Not Fragrance Sensitive)

This connects back to cultural understandings of appropriate kinds and levels of scents as well as being rooted in individual health assessments of fragrance sensitivity that do not take into account broader potential impacts of fragrances on indoor air or environmental health.

In the presence of known Fragrance Sensitive coworkers, the as-needed approach plays out in two ways. One is that employees do their due diligence by asking the opinions of their Fragrance Sensitive colleagues. If their Fragrance Sensitive colleagues

do not have a problem with their particular scents, then they do not make any changes. The second approach is that employees make specific and limited changes in the presence of Fragrance Sensitive coworkers. The first practice allows employees to continue to use scented products while absolving them from further worry about their fragrance practices because their scents have been vetted by those who are known to be Fragrance Sensitive. The second practice involves trial and error on the part of those who are changing their practices. It also functions to help minimize changes that participants have to make while reducing or eliminating any impetus to make further changes. Through weighing-in about appropriate scents, Fragrance Sensitive coworkers become arbiters of what scents are appropriate or not appropriate to wear in the workplace.

Since the policy rationale is to limit fragrance use in order to avoid causing harm to coworkers, some participants assessed that it is ok to use fragrances and scented products when they are sure that such scents are not harming sensitive coworkers. One described knowing which people had “allergic” reactions to fragrances.

> There are people who were allergic, and [fragrance] would affect their work environment, so you don't want to have a negative impact on somebody's work environment, therefore, don't purposely bring it in to their work environment. And I understand that there are people who have allergies, but I steer clear of those people or they never complained. Like, we had some people who were the allergics, yet when they would be around me, they would compliment the fragrance and never complained. I've never had a complaint from a coworker. […] Those people, it's just ironic, they'd compliment the fragrance. So, that frustrated me, so that was kind of like, 'um, really'? (Not Fragrance Sensitive)

Since the Fragrance Sensitive people that she knew either complimented her on her fragrances or did not complain about them, she assessed that it is ok to still wear them.

She concludes that she is not harming anyone because the people with obvious issues are people who either said that she smelled good or that her scents did not bother them. In light of that, she wondered why she had to stop wearing her fragranced products.

Others talked about checking in with sensitive coworkers to see if their products are offending them:

> I put on just body cream that my skin is so dry, needs something and I happen to find, unfortunately, it doesn't come unscented. So, I just try and pick the lightest scent that … I know is less offending… [O]ne of the gals who used to be - probably the most severely affected… she's a really good friend of mine. So, it passed her quality - if it passed her scent check, it didn't bother her, cause I'd asked her - I said "Do I?" – "Is this?" - She says "no, it's fine". Then I felt like everybody else would probably be ok with it. (Not Fragrance Sensitive)

Confirming that scents are not bothering a known Fragrance Sensitive coworker provides support for an assessment that one's products are ok to use in the workplace. Factors that are missed in these kinds of calculations include not knowing who all of the sensitive people are in a workspace; not knowing whether one will encounter others who are sensitive in the course of the work day; not realizing that reactions differ by person; and inter-employee/workplace dynamics that can influence whether and the degree to which a Fragrance Sensitive person is comfortable saying whether a particular employee's scent bothers him or her.

In the presence of known Fragrance Sensitive coworkers, others described how they made limited changes for specific coworkers who react to fragrances and scented products. One way that some participants engaged in partial modifications to their practices was by accommodating sensitive individuals by timing the use of problematic products. Such employees mentioned not eliminating products completely, but rotating

among a set of products in order to accommodate specific Fragrance Sensitive colleagues. This was one strategy of testing out and choosing products in personal care or laundry routines based on whether they bothered Fragrance Sensitive coworkers.

One Not Fragrance Sensitive participant, who stopped using scented lotions on work days because they bothered her Fragrance Sensitive coworker, described needing a number of hair products to keep her curly hair under control. She resisted changing her hair products after managers brought them to her attention.

> They thought it was my hair - they assumed it was my hair product. So, they had talked to me about it and I was like, I don't know what to tell ya. It's my shampoo and conditioner. It's what I use. And that was that. But I never changed it. (Not Fragrance Sensitive)

As a compromise, she did not change her hair products, but she rotated among a number of shampoos, trying to make sure that she did not use the ones that bothered her Fragrance Sensitive coworker on the days when he was in the office.

> I had several different [shampoos and conditioners]. So I know the one that bugged him, I tried not to use when I worked and, like I said, I don't wash my hair every day, so if I washed it on a Sunday, but didn't work until Monday, it would be fine by then, cause it would have dissipated. So, then I made sure to, the next day that I washed my hair - to use something that wouldn't bug him. (Not Fragrance Sensitive)

By not eliminating the bothersome shampoos and conditioners from her rotation, she had to consider the workplace, and whether she would be working with the Fragrance Sensitive coworker in a given day, while making the choice of which shampoo or conditioner to use that day. That coworker is no longer in the office, so she has been able to use scented hair, deodorant and laundry products that were discernable to the interviewer, without being asked to change. Under an as-needed approach, employees

may increase their use of scented products when known Fragrance Sensitive individuals are no longer employees in a particular office.

Making changes for specific Fragrance Sensitive individuals is a targeted approach that reduces exposure to problematic fragrances in the presence of known Fragrance Sensitive coworkers. Those who have made changes to their practices might assume that the changes that they have made go far enough for that person, and in turn, for others. Among the challenges of extrapolating from one Fragrance Sensitive employee are that fragrance sensitivities vary for people. As discussed in Chapter 3, Fragrance Sensitive people do not always exhibit outward signs of negative reactions to fragrances. They also do not necessarily tell their colleagues that they are Fragrance Sensitive.

Power dynamics and questions of legitimacy

A third challenge to fully complying with fragrance requests is the assessment that employees are using the "policy as a tool" to act out other issues in the workplace. In offices where the fragrance policy has played out in a public way, there were several employees who set limits to the extent to which they changed their practices based on assessments that their coworkers' fragrance requests are not related to actual health effects. There are a number of actions that provide some employees with evidence for assessments that their coworkers are invoking the policy for reasons other than actually being negatively impacted by their colleagues' scents. As described in Chapter 3, these actions include: selectively complaining about coworkers' scent practices depending on

the relationships with those coworkers; wearing scented products to work or talking about the use of fragranced products outside of work; making multiple complaints or generally being "difficult" in addition to fragrance complaints; "all of a sudden" becoming sensitive to products that coworkers have been using for a long time; and engaging in dramatic gestures such as fanning oneself in the presence of an alleged harmful fragrance rather than directly addressing coworkers who are wearing scented products. For example, one Not Fragrance Sensitive participant described how some coworkers make fragrance complaints based on relationships among coworkers and not on the objective presence of fragrances:

> People will complain about scents here. And it's proportionate to how much they like or dislike [you]…. If you're well-liked by a certain person, I could come in with the same shampoo as, let's say, person Z. If he's well-liked and I run my mouth too much, one of us is probably gonna get complained about. And you can guess which one it's going to be. So, I think, as with anything, if certain people annoy you, anything about them is going to annoy you. (Not Fragrance Sensitive)

Employees who are willing and who have made changes in the face of severe impacts are hesitant to make further changes when other coworkers who register fragrance complaints engage in some of the earlier mentioned behaviors and do not have obvious negative reactions to fragranced products. These assessments flow from and bolster skepticism regarding fragrance claims while also helping to create boundaries to the extent of participants' willingness to acknowledge and respond to requests. The following quote illustrates the example of setting boundaries, and being supported by management, while facing a fragrance claim from a coworker who "suddenly" became sensitive to products that the participant had been using for years:

> One of these people that suddenly became chemical sensitivity, sat down within 10 feet of me… and I sat down and started working, and not doing anything different than I'd been doing for years, she said "are you wearing something?" "Nope - doing the same thing I've always been doing". She says "no, I'm having [makes a gasping for air sound] problems breathing right now, oh my god, you - I wasn't having 'em before you got here, so it must be you". And she went to the supervisor's office, and supervisor… pulled me in the office, shut the door, sniffed me, said, "I don't smell anything." And I go "I'm not wearing anything, that's why you don't smell anything, she's having other kinds of problems". And I'll leave open the possibility that there was some scent or chemical or something that was causing this reaction that could be detected, but she believed that she was - she was having a reaction to something I had done and that was the only problem I ever had with her. (Not Fragrance Sensitive)

The Not Fragrance Sensitive participant does not wear cologne to work and had already switched his hand lotion to a fragrance-free version in order to comply with the policy. The Fragrance Sensitive coworker had made claims about other coworkers' scented products that they also had been using for years. Since he had been using his other products for years, he wondered why the Fragrance Sensitive coworker had never complained about the scents in the past. Given that, he did not think that such scents were actually causing an issue for that coworker.

Claims of fragrance sensitivity seem dubious when Fragrance Sensitive people themselves use scented products at home or work. Supervisors and coworkers expressed frustration that some Fragrance Sensitive employees would wear scents to work. Since Not Fragrance Sensitive employees are expected to comply with the policy, they felt that it was not okay for Fragrance Sensitive coworkers to act as arbiters of which scents were acceptable in the workplace when they should be following the no-scent practices that everyone else is expected to follow.

The main challenges with these kinds of behaviors are that they sow doubt and lead to questioning of the veracity of fragrance claims more generally. Such actions and assessments also impact workplace culture by increasing frustration levels. However, these assessments have mixed impacts on the degree to which Not Fragrance Sensitive employees have changed their practices or the degree to which they are fragrance-free because offices with stricter implementation policies mitigate some of the impacts. While stronger implementation and office cultures that supports reductions in fragrance use have led to big reductions in the use of scented products in some cases, questions over the legitimacy of fragrance claims cause frustration which impacts how employees feel about being asked to make changes to their practices.

The individual health argument and voluntary nature of the policy personalize the issues associated with fragrances and allow for individual assessments of colleagues and their behaviors. In the process of developing an understanding of fragrance sensitivity and how it works, Not Fragrance Sensitive employees observe the behavior of those who invoke the fragrance policy. Behaviors come under scrutiny and assessments are made of those making fragrance claims. Experiences with Fragrance Sensitive coworkers who exhibit less-severe or less-obvious reactions to fragrance chemicals contribute to skepticism about the existence of fragrance sensitivity as something that deserves to be accommodated in the workplace. In the presence of stricter enforcement of the policy, many have made extensive changes to their practices, but the "policy as a tool" rationale helps people to also challenge the claims made by their coworkers. Assessments that coworkers are using the "policy as a tool" to act out other interpersonal issues – that they

are not actually Fragrance Sensitive or that they do not actually have the extent of impacts that they claim - help employees to set limits on which requests to accommodate.

Discussion

By focusing on the health impacts on certain individuals rather than impacts on indoor air quality and broader health concerns, the case study fragrance policy mainly locates the problem within, and focuses attention on, specific individual bodies and their reactions to fragrances. While the individualized orientation has been effective in many instances in leading to behavior change, reducing the overall rate of wearing perfume or cologne, and making it easier for Fragrance Sensitive employees to make requests of their fellow employees, individualization helps to obscure the industrial sources of problematic reactions and shift contests and assessments to the interpersonal level. For employees who are skeptical of fragrance claims, people and their practices are problematized more than the scents that are causing issues. The roles of industry or generally accepted norms of appearance that require the use of such products remain uncontested in lay assessments of the workplace fragrance policy.

Employees exposed to the idea of fragrance sensitivity for the first time at work develop understandings of fragrance sensitivity through workplace experiences and connections, which form the basis for their lay assessments of fragrance claims. Interactions with and observations of Fragrance Sensitive colleagues, feedback on products from known Fragrance Sensitive colleagues, and employees' own senses of smell contribute to the evidence base that employees use to determine whether, and the

extent to which, to modify their fragrance use. Severe visible physical reactions to obvious fragrances provide strong evidence for modifying product use, but those kinds of experiences are not the norm for fragrance complaints in the workplace. More often, as Lipson (2004) observed, people experiencing chemical sensitivities look "normal" and not sick, which renders their issues invisible and creates a challenge for establishing legitimacy and corresponding actions to reduce symptoms.

The voluntary nature of the policy provides official support for employees with fragrance sensitivities while also allowing most employees extensive flexibility in selecting the kinds of products that they use in their personal care and laundry routines. Challenges arise when employees have conflicting interpretations of which scents are appropriate for the office context. Employees who either would prefer not to modify their use of fragrances at all or would like to limit changes to their practices request a high burden of proof from colleagues who are making fragrance complaints. One argument of employees who seek a high burden of proof is that if they are going to be inconvenienced or made uncomfortable by being unable to use their preferred scented products, they want evidence that their efforts will actually have health benefits for those making fragrance complaints. Assessments that challenge fragrance claims tap into processes of denial including "denial of self-involvement" and "outcome severity" (Opotow & Weiss, 2000) by dismissing notions that scents which are light or fade from perception could cause harm to anyone or that health impacts on Fragrance Sensitive employees are enough to justify accommodations from others.

Assessments of whether to change practices and estimates of the veracity of fragrance-related claims are influenced by prior relationships and interactions among

employees. In offices where there are few outstanding interpersonal conflicts and issues, fragrance claims are evaluated more favorably than in cases where there are more interpersonal issues. Fragrance requests in the latter situation are evaluated through a lens of skepticism, particularly if the requests are for scents that are not perceptible to many others and if the requests are made of employees who have already reduced their fragrance use. In such cases, employees use "counter-evidence" (Heikkinen et al., 2010) gathered through observations of Fragrance Sensitive employees' behavior to challenge the claims of their colleagues. In this way, challenges over the fragrance policy can exacerbate existing interpersonal problems.

In a national context that lacks official recommendations regarding this emerging health issue, employee assessments are grounded in their own experiences of scented products and their interactions with Fragrance Sensitive colleagues. Their assessments and corresponding actions, or lack thereof, are implicitly influenced by processes of denial that parallel those of larger scale environmental polluters. A majority of employees, those that are not Fragrance Sensitive, engage with fragrance information to decide whether to change their practices for the benefit of other people much like polluters are asked to change their practices for the benefit of the communities in which they are located and not for their own immediate benefit. There are potential economic consequences for acknowledging their behaviors. To some extent, the same is true for employees who may incur financial, convenience, and social costs in order to change their products to accommodate Fragrance Sensitive coworkers. A major difference between the employees who are emitting fragrances into the workplace and industrial

polluters is the implicit assumption that fragrances are generally benign and not harmful to most people.

Fragrances are examples of industrial traces that leave their mark on indoor air. Indoor air quality problems are often invisible (Jones, 1999; Murphy, 2006) much like many other pervasive toxic risks (Beck, 2009). Workplace fragrance restrictions have the potential to problematize and, thus, bring awareness to the potential ill effects of fragrances, which are often taken-for-granted as a normal, and for many, desirable, aspect of consumer products. Choosing to continue to wear scented products when there is a voluntary workplace policy is not necessarily evidence of non-compliance, but it is an exercise that distributes industrial traces of fragrance chemicals into indoor workplace environments. While the policy has been effective in reducing the prevalence of fragrances particularly in offices with known Fragrance Sensitive coworkers, resistance to the policy highlights limits to an individual health status understanding of fragrance impacts. Employees are not asked to think about the kinds of reactions that fragrances have on their own health. Assessments of the impacts on others' health suggest that the interpersonal dimensions of the policy may have been problematized to a greater degree than the potential health and environmental impacts of fragrances.

Conclusion: Individualization, Policy Recommendations, and Future Research

Fragrance molecules are examples of industrial traces that consumer products leave on bodies, disperse into the air, and wash into wastewater. Workplace fragrance policies provide an opening to problematize fragrances, which for many people, as explored in Chapter 2, are normal aspects of consumer products used to meet appearance and olfactory expectations. However, my findings show that the degree to which fragrances have been problematized is limited by an individual health frame of allergy that locates the problems associated with fragrance within the bodies of specific individuals who exhibit symptoms from fragrance exposures. Instead of the policy leading to questions about how fragrances might be affecting Not Fragrance Sensitive employees' own health, indoor air quality, or the broader environment, many employee assessments focus on how to avoid impacting coworkers while limiting disruption of their own fragrance practices. While an allergy frame limits further health and environmental questions, it has been effective in encouraging many employees to modify their use of fragranced products, particularly in offices with known Fragrance Sensitive employees. Implications of this limiting framework are explored in this conclusion through reflections on policy implementation, suggestions for organizations considering fragrance policies, and recommendations for future research.

Individualization serves as a limiting framework that contributes to compliance but does not provide a clear entry point for people to think about broader indoor air quality effects of fragrances including how fragrances might impact those who do not have obvious negative reactions to fragrance exposures. While industries manufacture

and distribute fragranced products, an individual health frame highlights interpersonal dimensions of the issues because it problematizes the bodies of individual employees and the fragrance claims that they make. In cases where Not Fragrance Sensitive employees resist requests to change, then the fragrance-wearing practices of employees who are Not Fragrance Sensitive also become problematic. Locating the source of the issues in individual bodies reinforces dominant understandings of the body and nature while limiting connections to broader environmental impacts and relations of production (Brown, 2007; Kroll-Smith & Kelley, 2008).

In employee assessments of their own fragrance practices, an individual health frame of allergy does not serve as an immediate challenge to what counts as a moral breach (Low, 2006) of appropriate fragrance use. Employees have been surprised when confronted about their use of fragranced products and feel like it is a moral judgment on their taste. This shows an understanding of an implicit appropriateness and moral correctness of the kinds of products that the industry produces and markets for consumers. By asking employees to change their fragrance behaviors, the policy has the potential to challenge and spark revisions in normative expectations for fragrance use in the workplace. This has happened in offices with stricter implementation where adherence to the policy has contributed to cultural shifts as well as embodied changes in how Not Fragrance Sensitive individuals experience fragranced products. In contrast, for those who have not had to make changes, moral assessments of appropriate scent use remain unquestioned.

Reflections on Policy Implementation

The voluntary fragrance policy, with its individual health rationale for avoiding fragrance use, has made a tangible difference for Fragrance Sensitive employees. Many employees report decreases in the amount of ambient scents in their offices since the fragrance policy was implemented. The policy brings awareness to the issue of fragrance sensitivity, legitimizes it, and encourages those with fragrance sensitivities to talk about their experiences and call out breaches to the policy. Previous research (Lipson, 2004; Söderholm et al., 2011), as well as examples from preliminary interviews, highlight some of the challenges – including negative health impacts and social ostracism - that employees with fragrance sensitivities have experienced at work in the absence of a policy and supportive employers. At this organization, the policy has led to a more comfortable work environment for many Fragrance Sensitive employees because it asks employees to reduce fragranced product use and encourages Fragrance Sensitive employees to share their concerns when issues arise.

While the use of perfume, cologne, and other products for which scent is the primary function has decreased substantially since the policy was implemented, fragranced products such as laundry detergents, fabric softeners, deodorants, and hair products continue to be used by a majority of employees. Such products may contribute to ambient scents and have been the sources of interpersonal disputes over implementation. The policy requests that employees avoid "strongly" scented versions of products for which fragrances are a secondary attribute. Due to variations in scent perceptions as well as normalized expectations for scents in a variety of consumer products, many employees do not assess their products as being strongly scented. Some were unsure or did not think

that products with "original" scents were fragranced, exemplifying how fragrances have become normalized and pointing to success of the kind of marketing strategy advocated by Jellenik (1975) to make consumers think of fragrances as being integral to the functioning of products. There is a cultural block to thinking of something that one likes as being strongly scented since scents that are "too strong" are associated with breaching etiquette and boundaries of acceptable behavior. Employees may not think of themselves as engaging in a moral breach (Low, 2006) of appropriate scented product use and therefore they do not make the connections to interrogate their own product use or discontinue using scented products. People who are asked to change their practices sometimes respond defensively because they feel like they are being accused of breaching a boundary of acceptability with which they disagree.

The rationale for the policy is to protect health by reducing reactions among employees who have sensitivities to fragranced products. As discussed in Chapter 3, employees generally understand that the rationale has a health basis and think that the negative impacts of fragrances constitute a health problem for specific individuals who react to normalized fragrance chemicals in the way that allergy sufferers react to pollen in the air. That assessment has contributed to compliance and a reduction in the use of fragranced products in many offices, particularly those with known Fragrance Sensitive employees. However, individualization also has limited the extent of implementation particularly in cases where employees do not know whether there is a Fragrance Sensitive coworker in their office or when they check their products with a Fragrance Sensitive coworker and then assume that those scents are okay for everyone. An individualized

approach to removing fragrance triggers limits potential reductions in overall scent exposures.

The policy rationale focuses attention on individual fragrance behaviors which inadvertently obscures the industrial roots of fragrance sensitivities. The rationale personalizes fragrance issues by pointing out individual actions and requiring individuals to change their practices. Negative reactions to fragrances become the fault of the user rather than the companies who manufacture, market, and distribute the products. The focus on "personal" behaviors means that employees are responsible for assessing the impacts of their practices and deciding whether to change them. This has led to some disputes among employees particularly in cases where those employees who are asked to make changes do not even perceive their products to be scented. There also have been challenges when employees make changes to their use of scented products and then are told that those changes do not go far enough. Reliance on individuals to assess the impacts of their own products keeps fragrance sensitivity in the realm of an interpersonal issue.

An allergy frame reinforces normalization of fragrance chemicals. In this estimation, the source of the problem is the anomalous body, not the fragrance molecules themselves. It acts within the conceptual boundaries of dominant understandings of health that focus on problems within the individual body (Brown, 2007) and understandings of interactions between bodies and the environment (Kroll-Smith & Kelley, 2008). The limiting framework of allergies hinders further inquiry and problematization of fragrances in terms of indoor air quality and environmental health. A

policy that has the potential to turn fragrances into a "matter of concern" helps to keep fragrances, at least partially, in a "black box" (Latour, 1993).

Recommendations for Workplace Fragrance Policies

The fragrance-free policy is only one among numerous policies governing employee behavior, which will be the case at any other organization that attempts to implement such a policy. On a practical level, starting with a voluntary policy with stricter implementation in departments that have Fragrance Sensitive employees is a good strategy. It balances the needs of Fragrance Sensitive individuals with the challenges associated with enforcing the policy including lack of awareness of potential health impacts of fragrance chemicals, variations in scent perceptions, and normative scent expectations among employees. This section includes some suggestions for expanding the rationale and strengthening implementation. These include: deemphasize the individual by expanding the policy rationale to include improving indoor air quality; offer communications, outreach, and education for an expanded understanding of the range of experiences along a fragrance sensitivity spectrum; and normalize an absence of ambient consumer product scents in the workplace.

The policy rationale would be strengthened if the individual health message is coupled with that of reducing overall fragrance use to improve indoor air quality for everyone. While research shows that fragrance reductions can improve overall indoor air quality (Uhde & Schulz, 2015), the case study site, like many other workplaces, does not explicitly mention indoor air quality in its policy rationale. Policies should include

language on indoor air quality and set a goal for reducing the overall amount of volatile organic compounds in the air. To support the indoor air quality rationale, expand awareness of the kinds of products and the ways that products can continue to emit scents into the workplace. For example, hair care products and laundry products, some of which are formulated to slowly release scents into the air (Fráter et al., 1998; Fortineau, 2004; Herrmann, 2014), have caused issues in the workplace. Some of the messaging to introduce and reinforce the policy could be about how some products figuratively turn people into "air fresheners" who emit scents into the spaces they inhabit.

In addition to the indoor air quality rationale, policy communications should increase awareness of the range of reactions that people have along the fragrance sensitivity spectrum as well as improve the visibility of Fragrance Sensitive people. Lipson (2004) found that invisibility of symptoms associated with chemical sensitivities is a challenge to establishing legitimacy for such illness claims. Testimonials from employees with fragrance sensitivities – whether anonymous or attributed to the author – can provide examples of the kinds of reactions that they have in the presence of fragranced products. Narratives could also include descriptions of relief of symptoms that people have experienced when coworkers have reduced their use of scented products. Policy communications that include written narratives might help to increase awareness of what fragrance sensitivity looks like by making the range of health-related scent reactions tangible in the ways that breaches of appropriate olfactory behaviors – both natural and synthetic - are tangible for people.

Another way to increase awareness is to encourage employees to talk about their experiences with others. Knowing that there are Fragrance Sensitive coworkers in an

office impacts compliance. A higher percentage of employees with known Fragrance Sensitive coworkers have made changes to their practices than those who do not have any or are unsure if they have any Fragrance Sensitive coworkers. Employees at the case study site have the option of speaking directly to coworkers when there is an issue. It is good that policy implementation gives employees the option to say something directly to coworkers who have used products that are causing issues.

A third suggestion is that employers normalize an absence of scents from consumer products in offices. To some degree, this happens as a side effect of strong implementation of fragrance restrictions. Employees in the "More Aware of Scents" category have made the biggest changes in their practices and have become used to reduced-scent offices to the point where they notice scents a lot more than they used to. They have experienced embodied changes and the lack of fragrances has become a regular, expected feature of their work environment. Highlighting fragrance-free expectations during the orientation process for new hires is one way to set expectations from the start of employment. Encouraging managers and human resources representatives to model fragrance-free behaviors would also go a long way toward reinforcing fragrance-free expectations and normalizing them in the workplace culture. As part of this strategy, employers should increase awareness of limitations in scent perceptions that make it difficult for individuals to smell the scented products emanating from their own bodies.

In addition to recommendations for those designing, communicating about, and managing implementation of workplace fragrance restrictions, the results in this dissertation point to a need for Fragrance Sensitive individuals to model fragrance-free

practices. Employees who make requests under the fragrance policy should make sure that they are not using fragranced products in the workplace. Some of the skepticism and interpersonal issues that have arisen with the fragrance policy are due to people with fragrance sensitivities wearing fragranced products at work. If other people have to make modifications for Fragrance Sensitive individuals, then those with fragrance sensitivities should not be using fragranced products at work. This would help to reduce potential interpersonal conflict as well as contribute to a culture shift toward fragrance-free.

Future Research

Modifying fragrance practices often requires changes in routines and habits outside of the workplace. As mentioned in Chapter 2, one of the things that makes it hard to change is meeting appearance expectations without the use of fragranced products. Future research could examine changes in consumption practices and routines as a result of workplace fragrance policies as well as practice-based resistance to modifying the use of fragranced products. Such research would build upon literature that is focused on "normal" everyday consumption and factors that influence adoption of environmentally preferable products and practices. For example, one study could examine how understandings of convenience (Shove, 2003), with fragranced products as examples of technologies that are integrated into practices, impact changes in practices and orientations toward fragrance restrictions. It could also explore the kinds of impacts that workplace fragrance policies have on habits outside of work.

Another area for future research is to understand how experiences of fragrance sensitivity intersect with privilege both within office environments and in relation to broader environmental concern. There are many dimensions and layers of privilege in office environments (Murphy, 2006). For example, in the struggles that led to the development of the concept of "sick building syndrome", office workers had to push through the constraints of status privilege that rendered indoor offices as safe and clean in comparison to industrial or outdoor work environments (Murphy, 2006). Those who do not experience obvious negative health impacts in the presence of fragrance chemicals have a certain kind of privilege that, absent of an intervention, allows them to remain unaware of fragrance issues. In the case of fragrances and indoor air quality, the exercise of privilege increases the level of indoor contamination. This aspect of the material consequences of the exercise of privilege is consistent with other conceptualizations of environmental privilege that demonstrate how privilege exacerbates environmental problems (Freudenburg, 2005; Park & Pellow, 2011; Pellow, 2002). However, the fact that the exercise of privilege through continued use of fragranced products actually increases exposures is inconsistent with previous explorations of environmental privilege which show how those with privilege are able to physically distance themselves from obvious environmental harms and avail themselves of more environmental goods (Freudenburg, 2005; Gould, Pellow, & Schnaiberg, 2008; Park & Pellow, 2011). Privilege may actually exacerbate individual exposure to contaminants when problematic industrial traces are hidden or obscured within products that people enjoy using. The case of fragrances in the workplace suggests that there are awareness and action dimensions of environmental privilege, a distinction that should be explored in future research.

Conclusion

A small and growing number of workplaces around the country have developed fragrance policies and fragrance issues in the workplace deserve more attention. For example, recent survey results show that 35% of respondents experienced negative health impacts as a result of fragrance exposures and 53% of respondents are in favor of fragrance-free workplaces (Steinemann, 2016). The case study organization should be commended for addressing a challenging contested illness issue that has caused problems for people within the organization. This dissertation explores how employee assessments of and reactions to the fragrance policy are influenced by existing moral frameworks about appropriate fragranced behaviors and understandings of fragrance sensitivity as a kind of allergy that constitutes an individual health issue. One underlying goal of this research project is to understand what happens when people are made aware of environmental health impacts of their consumption activities. Through everyday consumption activities, people, for the most part unwittingly, form a bridge from the factory to distribute industrial traces that contaminate environments. As is the case with other synthetic molecules that are part of consumer products, people are often unaware of potential impacts, or even the existence, of such chemicals as they discharge them out into their local environments. Rather than being a story about air quality and environmental health, this story is more about individual health and whether to modify practices to help individuals who have bad reactions to fragranced products. I hope my analysis will help to shift some attention away from the anomalous body and focus it back on fragrances, their role in meeting cultural norms, and their impacts on broader health and environmental quality.

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Appendix A: Interview Protocol

People who proposed and/or passed the ban: (executives and managers):
How did you come up with the idea to ban fragrances in your workplace? [probing question – did someone within the organization express a problem with fragrances?]
What made you consider this ban?
What is the main rationale for choosing to propose such a ban?
What was the process like in terms of passing the ban? (I would ask specific questions here that would be based on my background reading regarding the particular site.)
Who drafted the language? What kinds of considerations were taken into account when drafting the policy language?

People who have to implement the ban: (managers and HR representatives):
What is the rationale for the workplace fragrance ban?
What do you think about the workplace fragrance ban?
Please describe the process for communicating the ban to employees.
How does the policy work in your office?
Has it changed over time? In what ways?
Does it also apply to cleaning products used in the office? Hand soaps in the restrooms? Air fresheners in the restrooms?
Do you have employees with fragrance sensitivities in your office?
How have employees reacted to the ban?
Were there any challenges to instituting the ban? If so, please describe.
Do you comply with the ban? How so? How not?
Has it been a challenge for you to comply with the ban? If so, in what ways?
Were you given an opportunity to express your opinions before the ban went into effect?
Would you change anything about the policy?
Do you think that the ban should be in effect? Why/why not?

People who are impacted by the ban: (workers):
What is the rationale for the workplace fragrance ban?
What do you think about the workplace fragrance ban?
How has the ban/reason for the ban been communicated to you?
How does the policy work in your office?
Has it changed over time? In what ways?
Does it also apply to cleaning products used in the office? Hand soaps in the restrooms? Air fresheners in the restrooms?
Do you comply with the ban? How so? How not?
Has it been a challenge for you to comply with the ban? If so, in what ways?
Were you given an opportunity to express your opinions before the ban went into effect?
How have your fellow employees reacted since the ban went into effect?
Were there any challenges to instituting the ban? If so, please describe.
Would you change anything about the policy?
Do you think that the ban should be in effect? Why/why not?

For all employees:

What kinds of scents do you like in your personal care products? Cleaning products? Air fresheners? Perfumes/colognes?

Do you purchase/where do you purchase your personal care products? Cleaning products? Air fresheners? Perfumes/colognes?

Have you had to make any changes to the products that you use due to this policy? If so, please describe. [probe – personal care and laundry products]

How do you feel about being asked to make such changes?

Prior to this workplace policy being implemented, had you ever heard of fragrances as being bad or causing problems? If so, please describe.

Have you ever had a negative reaction to fragrances or scented products? If so, please describe.

Does anyone that you know have negative reactions to fragrances? If so, please describe.

What do you think about the idea that fragrances are harmful to the health of people?

Do you think that fragrances have an impact on indoor air? Why/why not? Have your views changed since you have had the fragrance policy at work?

Do you think that fragrances have an impact on outdoor air? Why/why not? Have your views changed since you have had the fragrance policy at work?

Some people have claimed that fragrances act like secondhand smoke in indoor environments. What do you think of that claim?

What do you think about the idea that the products people use may be contributing to pollution? Indoor pollution? Outdoor pollution? Have your views changed on this since you have had the fragrance policy at work?

Have you made any other changes in the products that you use either at work or at home since the fragrance policy has been in place?

[If question doesn't come up earlier] - What do you think about the idea that asking people to stop wearing scented products at work is a violation of people's rights to choose the kinds of products that they want to wear?

Have I missed anything? If so, please share any other views that you have about the workplace fragrance ban.

Please also share any other views on how it may have impacted your product choices.

Demographics:
Workplace role
Length of time at workplace
Gender
Age
Race/ethnicity
Level of education
City/town of residence
Homeowner/renter
Marital status
Number and ages of children
Whether one identifies as having asthma, allergies, or environmental illness/chemical sensitivity
Home: Recycle Compost Energy Efficiency Water conservation Transportation to work

Appendix B: Employee Fragrance Survey

Online version with notes

Include the following phrase at the top of each page:

"Fragrance" refers to scents that are in the products that people use in their personal care and cleaning routines. Products include perfumes, colognes, hair care products, lotions, deodorants, powders, laundry detergents, fabric softeners, air fresheners, cleaning products, etc.

Q1 When did you first hear about your workplace's fragrance-free policy?

- More than 2 years ago
- 1 or 2 years ago
- Within the past year
- Not sure
- Not applicable – I did not know that my workplace has a fragrance-free policy for employees.

If Not applicable – I did not ... Is Selected, Then Skip to On average, how many days per week do...

Q2 Before the fragrance-free policy was implemented in your office, how many days per week, on average, did you wear perfume, cologne, aftershave or scented body sprays to work?

- Choices: 0, 1, 2, 3, 4, 5, 6, 7

Q3 Please complete the following sentence: Since my office implemented the fragrance-free policy, I notice fragrances/scented products outside of work _____ :

- A lot more than before
- More than before
- Somewhat more than before
- No change
- Somewhat less than before
- Less than before
- A lot less than before

Q4 On average, how many days per week do you smell coworkers' fragrances or scented products in your work area?

- Choices: 0, 1, 2, 3, 4, 5, 6, 7

Q5 How many times:

- Have you been asked to stop wearing a fragrance or scented product to work?
- Have you asked one or more coworkers to stop wearing a fragrance or scented product to work – either directly to the coworker or through a request to a manager?

  - Choices: None, 1, 2, 3, 4, 5, 6 or more times

Q6 Which of the following products do you think should fall under the fragrance-free policy's request to avoid the use of strongly scented personal hygiene products in the workplace? (Check all that apply.)

- Perfume, cologne or aftershave
- Body lotions or sprays
- Hair care products
- Deodorants
- Shower gels/body washes
- Laundry detergent
- Liquid fabric softener
- Dryer sheets
- Hand soaps
- Hand sanitizer
- Air fresheners
- Cleaning products used at your desk
- None of the above
- Other, specify: _____

Q7 To what extent are fragrances and scented products restricted in your department?

- Not at All = 0
- 1
- 2
- 3
- 4
- 5
- Completely = 6

Q8 Over the past year, on average, how many days per week have you had the following reactions at work:

- I enjoyed the scent of a fragrance or scented product used by a coworker
- I did not like the scent of a fragrance or scented product used by a coworker.

  - Choices: 0, 1, 2, 3, 4, 5, 6, 7

Q9 Please select how much you agree or disagree with each of the following:

- Fragrances can relax people through aromatherapy.
- Fragrances can cause asthma attacks.
- Using fragrances is a good way to express one's personality.
- Fragrances can cause rashes or hives.
- Fragrances can cause headaches.
- People should be exposed to fragrances or they will become sensitive to them.
- Fragrances can annoy people if the scents are too strong.
- I like that my workplace has a policy that limits the use of fragrances in the workplace.

Q10 Please select how much you agree or disagree with each of the following:

- Asking employees to avoid using fragrances or scented products at work is a violation of their right to choose the kinds of products that they want to wear.
- Fragrances can have a negative impact on indoor air quality.
- Fragrances can have a negative impact on water quality.
- The chemicals that are released into the air from fragrances can pose a threat to health.
- Fragrances can make indoor air smell better.

Q11 Please select how much you agree or disagree with each of the following:

- Companies would not be allowed to put scents in products if the scents were harmful to people's health.
- Companies would not be allowed to put scents in products if the scents were harmful to the environment.
- Products that people use in their personal care or household cleaning routines may contribute to environmental pollution.

Choices for Q9, Q10, and Q11:

- Strongly Agree
- Agree
- Somewhat Agree
- Neither agree nor disagree
- Somewhat Disagree
- Disagree
- Strongly Disagree

Q12 Do you supervise other employees in your department?

- Yes
- No

Q13 In which department do you work?

- List of departments

Q14 What year did you start working for the organization?

- 5 year increments

Q15 What is your gender?

- Female
- Male
- Other _____

Q16 How old are you?

- 18-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55-59
- 60-64
- 65 or older

Q17 What is your ethnic/racial background? (Check all that apply.)

- Asian/Asian-American
- Black/African-American
- Hispanic or Latino/a
- Native American or Alaskan Native
- Native Hawaiian or Pacific Islander
- White/European-American
- Other, specify: _____

Q18 What is the highest level of education completed by:

- You?
- Either of your parents (or guardians)?

Choices:

- Less than high school
- High school diploma or GED
- Some college
- Associate's or technical degree
- Bachelor's degree
- Some graduate school
- Master's degree
- J.D.
- Doctoral Degree
- Other

Q19 Are you a homeowner or renter?

- Homeowner
- Renter
- Other _____

Q20 How old is your oldest child?

- Not applicable
- Under 5 years old
- 5-10 years old
- 11-18 years old
- 19-29 years old
- 30 years or older

Q21 At home, do you compost food scraps?

- Yes - on a regular basis
- Yes - sometimes
- No

Q22 What percentage of the fruits and vegetables that you eat are labeled as "organic"?

- Choices: 10% increments from 0 to 100%

Q23 Do you smoke cigarettes?

- Yes - Daily
- Yes – Occasionally
- No – I used to, but I quit.
- No – I never smoked.

Q24 Do you have asthma?

- Yes
- No

Q25 Do you have allergies to any of the following? (Check all that apply.)

- I don’t have any allergies.
- Pollen (grass, trees, etc), mold, or dust mites
- Cats, dogs, or other animals
- Food(s)
- Medication(s)
- Other, specify: _____

Q26 Do you have chemical sensitivities?

- Yes
- No
- I don't know.

If No Is Selected, Then Skip to On average, how many days per week do...If Not sure Is Selected, Then Skip to On average, how many days per week do...

Answer If Do you have chemical sensitivities? Yes Is Selected

Q27 What items trigger your chemical sensitivities?

Q28 On average, how many days per week do you wear perfume, cologne, aftershave or scented body sprays:

- To work?
- Outside of work?

Choices: 0, 1, 2, 3, 4, 5, 6, 7

Q29 Which of the following products have you switched or stopped using in order to be in compliance with your workplace's fragrance policy? (Check all that apply.)

- I have not made any changes to my products as a result of the fragrance policy.
- Perfume, cologne, aftershave or body sprays
- Body lotion
- Hand lotion
- Hair care products
- Deodorants
- Shower gels/body washes
- Laundry detergent
- Liquid fabric softener
- Dryer sheets
- Hand sanitizer
- Air fresheners
- Cleaning products used at your desk
- Other, specify: _____

Q30 What portion of the products that you use in your personal care and laundry routines are scented?

- All are unscented= 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- All are scented = 100%

Q31 Which of the following scented products do you use at home? (Check all that apply.)

- Air freshener sprays
- Air freshener plug-ins
- Scented candles
- Scented wax melts
- Scented oil reed diffusers
- Incense
- Other scented products, specify below: _____
- None of the above

Q32 What brand(s) of laundry detergent do you use on a regular basis?

Q33 Not including yourself, are there any coworkers in your office who are sensitive to fragrances or scented products?

- Yes
- No
- I don't know.

Q34 Are any of your family members or friends sensitive to fragrances or scented products?

- Yes
- No
- I don't know.

Q35 Are you sensitive to fragrances or scented products?

- Yes
- No
- I don't know.

If Yes Is Selected, Then Skip To What kinds of reactions do fragrances...If No Is Selected, Then Skip to Please share any other views that you...If I don't know. Is Selected, Then Skip to Please share any other views that you...

Answer If Are you sensitive to fragrances or scented products? Yes Is Selected

Q36 What kinds of reactions do fragrances cause for you? (Check all that apply.)

- Headache
- Breathing difficulty
- Nausea
- Confusion
- Skin rash
- Other (please specify) _____

Answer If Are you sensitive to fragrances or scented products? Yes Is Selected

Q37 When was the last time that a coworker's fragrance or scented product triggered your fragrance sensitivity?

- Within 1 month
- 2 to 5 months ago
- 6 months to 1 year ago
- 1 to 2 years ago
- More than 2 years ago
- Not Applicable – I have not had any negative reactions to my coworkers' fragrances or scented products.

Q38 Please share any other views that you have about the workplace fragrance policy or fragrances in general.

Q39 If you have views or concerns about other odors in the workplace, feel free to list them here.