

Effects of a Product Display and Environmental Fragrancing on Approach Responses and Pleasurable Experiences

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ABSTRACT

The effects of atmospherics (i.e., a product display, pleasant and [in]appropriate ambient fragrances) on approach responses toward a product (global attitude, purchase intention, estimated price, and price the customer is willing to pay) and pleasurable experiences (sensory, affective, and cognitive pleasure) were investigated. In addition, the mediating effects of sensory, affective, and cognitive pleasure on approach responses toward a product were examined. Statistical analysis of responses of 109 female subjects each randomly assigned to one of four treatments showed that the appropriately fragranced display generated the most positive effect on approach responses and pleasurable experiences. A component of cognitive pleasure (seeing oneself in a fantasy) and multisensory pleasure mediated two approach responses: attitude toward the product and purchase intention. Findings suggest the importance of combining a display with environmental fragrancing as a marketing tool, but careful selection and application of environmental fragrances are required. © 2000 John Wiley & Sons, Inc.

Merchandisers have long recognized the importance of the store environment in enticing consumers to shop and purchase. Industry

publications (e.g., *Visual Merchandising and Store Design*) are devoted to store design and display techniques aimed at affecting consumer behavior in positive ways. Empirically, this has been termed atmospherics, or the conscious design of the store environment to positively affect the consumer (Kotler, 1973–1974).

Atmospherics research tends to operationalize the effect of one design variable of the retail environment (Bellizzi & Hite, 1992; Grossbart, Hampton, Rammonhan, & Lapidus, 1990; Hornik, 1992; Sprangenberg, Crowley, & Henderson, 1996; Yalch & Sprangenberg, 1990) on consumers' approach responses such as attitude, behavioral intention, and behavior toward a product. An exception to this trend is a study by Baker, Levy, and Grewal (1992), which found that a combination of ambient cues (lighting and music) and social cues (number and friendliness of employees) influenced consumers' willingness to purchase. The latter study illustrates that research remains regarding the effect of a combination of design elements on approach responses.

Whereas experimental control dictates the manipulation of a small number of variables, many design elements are routinely combined in the creation of actual product displays. A product display is a composite of some or all of the following: products, background (e.g., floors and walls), mannequins, fixtures, props, signage, lighting, and music that create an enriched experience for the customer through a gestalt of retail environment elements concentrated in areas of the store. Research (Ko & Rhee, 1994) investigating the consequence of product displays in stores on consumer approach responses has been scant. However, the pervasiveness of product displays in stores indicates the importance of further empirical study.

Merchandisers are beginning to pay more attention to olfactory elements of the retail environment. Recently, environmental fragrancing (i.e., adding a pleasant fragrance to the retail environment to enhance shopping experiences and to increase sales) has been used by a growing number of retailers (McCarthy, 1992; Miller, 1991; Mitchell, 1994) and has become the topic of empirical study (Hirsch, 1995; Knasko, Gilbert, & Sabini, 1990; Sprangenberg et al., 1996). Confidence of retailers in environmental fragrancing is not unequivocally supported by empirical results. Therefore, research aimed at better understanding the role of environmental fragrancing in atmospherics is still needed.

A growing body of research supports the importance of atmospherics as a marketing tool to affect approach responses toward the store and the product by enhancing sensory and/or affective pleasure (e.g., Bellizzi & Hite, 1992; Donovan & Rossiter, 1982; Donovan, Rossiter, Marcoolyn, & Nesdale, 1994; Knasko et al., 1990; Sprangenberg et al., 1996). However, the importance of incorporating entertainment in stores to entice consumers to shop and purchase (Reda, 1995; "That's entertainment," 1994), suggests that *cognitive pleasure* may also be generated by atmospherics. Cognitive pleasure results from activating cognitive pro-

cesses, including those involved in experiential aspects of consumption, such as mental play or amusement and fantasizing (Holbrook & Hirschman, 1982). Yet, no research was found that determines whether cognitive pleasure, fostered by atmospherics, has an effect on approach responses and whether a combination of sensory pleasure, affective pleasure, and cognitive pleasure plays a role in consumer responses toward a product.

The purpose of the present research is to further the study of atmospherics by focusing on the impact of the product display (i.e., simulated store display) and environmental fragrancing on subjects' approach responses (attitude toward the product, purchase intention, estimated price of the product, and price the consumer is willing to pay for the product) and components of aesthetic experience (sensory pleasure, affective pleasure, and cognitive pleasure). The role of sensory, affective, and cognitive pleasure as mediating variables to these approach responses will be examined.

PRODUCT DISPLAY AND ENVIRONMENTAL FRAGRANCING AS COMPONENTS OF ATMOSPHERICS AFFECTING APPROACH RESPONSES

A product display involves a consciously designed presentation of selected merchandise in a defined area (e.g., storefront window or end of aisle), highlighting the product(s) and creating a mood and/or message with the intent to positively affect consumers' approach responses. Guides for visual merchandisers make general claims that a display may attract consumer attention and may create consumer desire for the presented merchandise (Cahan & Robinson, 1984) and make specific claims that product displays are responsible for about one out of every four retail sales (Mills, Paul, & Moorman, 1995). Given the empirical support for the positive effect of store environment design (Forsythe & Bailey, 1996) and its elements such as music (Engel, Blackwell, & Miniard, 1995; Gorn, 1982; Miller, 1991; Milliman, 1982) and lighting (Baker et al., 1992) on approach responses, these claims appear reasonable. These claims have begun to garner empirical support; product displays are one of the factors that entice consumers to make impulse purchases (Ko & Rhee, 1994). In light of the empirical evidence for effectiveness of the retail environment, its individual elements, and displays on approach responses, it was hypothesized that

- H1:** *Placing the product in a display will enhance subjects' approach responses toward the product (attitude, purchase intention, estimated price of the product, and price the consumer is willing to pay for the product).*

Empirical studies on the influence of environmental fragrancing on approach responses have provided seemingly inconsistent results. Hirsch (1995) found that gamblers exposed to a pleasant fragrance in a casino area spent more money than did gamblers in areas unscented or scented with another pleasant fragrance. Another study (Sprangenberg et al., 1996), using a simulated store catering to students, found that a pleasant environmental fragrance had a positive influence on evaluations of the store environment, evaluations of general merchandise, and intentions to visit the store. Yet, time spent in the environment did not vary significantly and purchase intentions toward specific products (i.e., backpack, calendar, self-selected product) revealed mixed results. The researchers (Sprangenberg et al., 1996) concluded that low involvement with the product or the utilitarian nature of the product may account for the inconsistent results regarding the product. Adding to these inconsistent results, Knasko et al. (1990) found that customers lingered longer in the pleasantly scented area of a fine jewelry store, but were no more likely to purchase. Therefore, environmental fragrancing did not have a consistent effect on purchase intention or purchase in these three studies. Knasko et al. (1990) speculated that the high expense of the jewelry products limited the effect of the fragrance on purchase decisions.

Consequently, the effect of environmental fragrancing on approach responses toward the product may depend, in part, on the combination of pleasure created by the environment and the product. The amount of money spent by gamblers was positively affected by the pleasure-oriented nature of the casino. However, purchases in the pleasure-oriented jewelry store were buffered by the expense of the product. Approach responses toward the simulated store were positively affected by environmental fragrancing, but the approach responses toward the utilitarian products in that setting were not consistently affected. If cost or utility of the product are of prime importance, then pleasure created by environmental conditions may not be effectual in enhancing approach responses toward the product.

In the present study the environment (display) and product (satin fabric sleepwear) emphasized pleasure rather than utility. The scenario suggested by the display (wearing the product for a casual, romantic experience) and the aesthetic features of the lingerie product (e.g., fabric smoothness) emphasized pleasure. The selection of lingerie for the present study parallels the practices of retailers such as J.C. Penney and Victoria's Secret that use environmental fragrancing with lingerie products to enhance pleasure for the consumer (McCarthy, 1992). In addition, the product selected for the present study does not suffer from the limitation of high price. In light of the pleasure-oriented nature of the display and of the product, and because this product does not have the limitation of a high monetary cost, it was proposed that

H2: *The displays with pleasant environmental fragrances will enhance subjects' approach responses toward the product more than will the product alone or the display without a fragrance.*

Olfactory stimuli in the study of atmospherics are commonly selected on the basis of sensory *pleasantness* (e.g., Hirsch, 1995; Knasko et al., 1990; Sprangenberg et al., 1996). However, *appropriateness* of scent, a cognitive aspect, may also influence consumer behavior. Appropriateness pertains to congruity between perceptions of an environment or object in the world and the mental representations of the environment or object stored as a cognitive schema. Research suggests that these schemas contain multisensory information resulting from integration of information from many senses (Fiore, 1993; Neisser, 1976; see Marks, 1978; Walk & Pick, 1981 for reviews). To determine congruity, information from the multisensory features of an environment or object is compared against the schema's mental representations of multisensory features of that environment or object. Appropriateness and congruity refer to a high level of fit between how an environment or object is perceived and what is expected according to stored information in the relevant cognitive schema. Congruity between perceptions of an environment or object and existing schemas gives rise to familiarity, acceptability, a sense of liking, and approach responses (Mandler, 1982).

The influence of appropriateness of olfactory cues on consumer behavior has empirical support (Bone & Jantrania, 1992; Mitchell, Kahn, & Knasko, 1995). Bone and Jantrania (1992) found that appropriateness of the product scent (e.g., sunscreen scented with coconut rather than lemon) enhanced perceived product quality. Mitchell et al. (1995) concluded that an appropriate ambient odor (i.e., odor emitted by a product, used to scent the room), such as a floral ambient scent used with floral arrangements, increased consumers' information processing time and expanded the number of products considered. Yet, the influence of appropriateness of an ambient scent that is *not* a constituent odor emitted by the object or product in the environment remains to be explored.

Because schemas are based on information drawn from past experiences, appropriateness of an ambient scent may be based on the scent commonly added to the environment regardless of the scent's relationship to physical objects actually constituting that environment. In the present study, the display (environment) with props such as plump throw pillows, a soft throw blanket, and candelabra as well as a posed mannequin wearing satin sleepwear perhaps suggests a casual yet romantic at-home scenario. Particular types of fragrances commonly added to similar scenarios in real life may be seen as more appropriate or congruent with the display scenario, even though the scents are not emitted by the props or the product. The present study will explore the effect of combining a pleasant and appropriate environmental fragrance

added to a display on approach responses toward the display product that does not emit a scent. Based on the positive effect of congruity between perceptions and schemas on liking and on approach responses, the positive influence of appropriateness of product scent on consumer behavior, and schemas for environments containing fragrances added to the setting, it was proposed that

H3: *The display with the appropriate environmental fragrance will enhance subjects' approach responses toward the product more than will the display with the inappropriate fragrance.*

EFFECT OF ATMOSPHERICS ON SENSORY PLEASURE, AFFECTIVE PLEASURE, AND COGNITIVE PLEASURE

Fiore and Kimle (1997) explained how consumers may derive three types of aesthetic pleasure from products and promotional environments. They outlined that sensory, affective, and cognitive pleasure result from positively evaluated (a) stimulation of the senses, (b) arousal or expression of emotions, and (c) comprehension or creation of symbolic content (e.g., creation of a fantasy image) for nonutilitarian purposes, respectively. Sensory pleasure entails positively evaluated activation of sensory receptors (i.e., eyes, ears, nose, skin, muscles, and mouth) by qualities of the form of the object or environment. Examples of such qualities are intensity of color, sound, or odor; smoothness of texture; rhythm of movement; and sweetness of taste. Affective pleasure entails positively evaluated emotions or feelings evoked by or expressed through the qualities of the form of an object or environment. For example, intensity of light may affect the emotion state of individuals; medium-high-intensity light may lead to a uplifted or excited state, whereas low levels of light may lead to feelings of calm. Fiore and Kimle (1997) noted that sensory and affective pleasure are interrelated because both depend on evaluations of qualities of the form of the product or environment. Cognitive pleasure will be discussed in the section preceding Hypothesis 5.

Studied individually, sensory pleasure (Milliman, 1982) and affective pleasure (Darden & Babin, 1994) have been found to be induced by atmospherics. Further, research has found interrelationships between sensory and affective pleasure (Terwogt & Hoeksma, 1995), including pleasure created by aspects of the retail atmosphere (Baker et al., 1992; Bellizzi & Hite, 1992; Dubé, Chebat, & Morin, 1995). A display is similar to a retail environment, because both are designed to provide sensory and affective pleasure through the qualities of the forms of products, props, music, and lighting. Therefore, the present study may show that the product display induces sensory pleasure and affective pleasure, similar to the effect of the general retail environment.

Studies of nonretail settings (Engen, 1982; Gibson, 1966; Gulas & Bloch, 1995; Van Toller, 1988) suggest that olfactory cues may have a significant impact on both sensory and affective components of pleasure. First, because of the inherently hedonic nature of odor (Engen, 1982), adding a pleasant scent to the product display may enhance sensory pleasure. Second, research (Engen, 1982; Lorig & Schwartz, 1988; Van Toller, 1988) suggests that odor can strongly and instantaneously produce affective pleasure due to the physical linkage between olfactory nerve fibers and the limbic system of the brain which is responsible for mediating human emotions. These studies (Engen, 1982; Lorig & Schwartz, 1988; Van Toller, 1988) suggest a physiological mechanism for affective experience that is different from the mechanisms forwarded by cognitive psychology. Cognitive psychology theories propose that affective state is the outcome of (a) higher-order mental processes involved in interpretation of information (Mandler, 1982) or (b) emotion-rich evoked memories (Simon, 1982).

In the present study, the pleasant qualities contributed by the combination of the display and environmental fragrances may augment the level of sensory pleasure derived from the product alone. The visual and tactile qualities of the display may ameliorate pleasure derived by the visual and tactile qualities of the product. The pleasant sounds of the music in the display and the pleasant scents of environmental fragrancing may activate sensory receptors of the ears and nose that would not be affected by the product alone. Therefore, the addition of a display and environmental fragrancing may enhance sensory pleasure. Based on empirical evidence of the effects of atmospherics and odor on sensory pleasure and affective pleasure, and the additional pleasurable sensory stimulation from elements of the display and environmental fragrances, it was hypothesized that

H4: *The display with or without environmental fragrancing will enhance subjects' sensory pleasure and affective pleasure more than will the product alone.*

Cognitive pleasure results from cognitive activity involved in understanding or creation of symbolic content. Understanding requires congruity between information and cognitive schema or successful resolution of incongruity by modifying the information or the mental schema (Mandler, 1982; Meyers-Levy & Tybout, 1989). Research shows that cognitive pleasure results when information is congruent with the schema (Zusne, 1986) or when moderate incongruity is resolved (Mandler, 1982; Meyers-Levy & Tybout, 1989). Cognitive activity involved in creation of symbolic content such as mental imagery, daydreams, and fantasies may also result in cognitive pleasure. Cognitive pleasure from the activity of creating symbolic content may be augmented by the content of the mental image itself. MacInnis and Price (1987) cautioned that it is

difficult to disentangle the positive effects of the cognitive process and the content of the created image.

Consumption experiences involving radio commercials (Bone & Ellen, 1992), television commercials (Solomon & Greenberg, 1993), and print advertising (Keor, 1983; Oliver, Robertson, & Mitchell, 1993; Scott, 1994; Unnava & Burnkrant, 1991) require cognitive activity to both understand information presented and to create imagery. Similarly, information from music, products, posed mannequins, and props in store displays may require cognitive activity of understanding information and creation of imagery involving the use of the product. In addition, research in nonretail settings (Kenneth, 1927; King, 1988) suggests that adding an environmental fragrance to the display may augment cognitive pleasure because scents stimulate mental imagery of rich memories and associations. Scents enhance the vividness and clarity of a fantasy image and the level of experiencing oneself in a fantasy image (Wolpin & Weinstein, 1983).

However, appropriateness of the environmental fragrance leading to congruity of information may affect ability to evoke mental imagery and cognitive pleasure. Psychological studies (King, 1988; Wolpin & Weinstein, 1983) showed that smelling scents that were congruent with the content of a fantasy image significantly improved the overall fantasy experience. Therefore, an appropriate fragrance for the display may result in cognitive pleasure due not only to congruency of the information to the relevant schema, but also due to facilitation of mental imagery and the pleasurable content of the imagery. Because appropriateness of olfactory information may foster two sources of cognitive pleasure, congruity of information and mental imagery, it was proposed that

H5: *The appropriately fragranced display will enhance subjects' cognitive pleasure more than will the inappropriately fragranced display.*

SENSORY, AFFECTIVE, AND COGNITIVE PLEASURE AS MEDIATING FACTORS OF APPROACH RESPONSES

Sensory Pleasure

Atmospherics research (Eroglu & Machleit, 1990; Grossbart et al., 1990; Hornik, 1992; Ko & Rhee, 1994; Langrehr, 1991; Yalch & Sprangenberg, 1990) has found that sensory aspects of the store environment, including crowding, noise level, touch, color, and temperature, influence approach responses. Yet, seldom is the mediating role of sensory pleasure examined. Atmospherics research (Knasko et al., 1990; Smith & Curnow, 1966 [store music]; Sprangenberg et al., 1996 [environmental fragrancing]) that has examined the mediating role of sensory pleasure found

sensory pleasure to significantly modify approach responses. Therefore, sensory pleasure may mediate the effect of the display and environmental fragrance on approach responses in the present study.

Affective Pleasure

Affective states involved in consumption can be effectively represented by two dimensions, (a) emotional pleasure and (b) emotional arousal (Donovan & Rossiter, 1982). Emotional pleasure is the evaluation dimension of affect referring to the degree to which one feels good, happy, or satisfied whereas emotional arousal refers to the degree to which one feels stimulated, excited, or alert in the situation (Mehrabian & Russell, 1974).

Research on store atmospherics (Baker et al., 1992; Bellizzi, Crowley, & Hasty, 1983; Bellizzi & Hite, 1992; Bruner, 1990; Crowley, 1993; Donovan et al., 1994) suggests that both emotional pleasure and emotional arousal may influence approach responses. In this research emotional pleasure was found to increase approach responses. However, the results were not as clear-cut for the effect of emotional arousal on approach responses. Baker et al. (1992) found that emotional pleasure and emotional arousal together affect the approach response of willingness to buy. Donovan et al. (1994) found that emotional pleasure alone predicted the approach responses of time and money spent in the store at the $p < .05$ level. Similarly, Bellizzi and Hite (1992) found that emotional pleasure alone was positively associated with approach responses related to purchase intentions. Consequently, research provides support that emotional pleasure may mediate the effects of the display and environmental fragrances on approach responses in the present study, but emotional arousal should also be explored because of the mixed results of the effect of emotional arousal on approach responses in past store atmospherics research.

Cognitive Pleasure

As discussed, imagery involving the use of the product may result in cognitive pleasure. Whereas it has been proposed in review articles that pleasurable cognitive experiences are generated by products (Hirschman & Holbrook, 1982) and the retail environment (Langrehr, 1991), neither report provided empirical evidence of the influence of cognitive pleasure on approach responses. Empirical research in advertising provides mixed results regarding the effect of imagery (cognitive pleasure) on approach responses. Bone and Ellen (1992) found that imagery influenced attitude toward the advertisement, but did not influence attitude or purchase intentions toward the brand. Another advertising study (Oliver et al., 1993) found that imagery enhanced liking and purchase intention toward a product.

Research (Bone & Ellen, 1992; MacInnis & Price, 1987) concluded that these contradictory results may be due to the level of envisioning oneself in the image. Envisioning or experiencing oneself in the image enhances the likelihood of approach responses. This conclusion is supported by Anderson's (1983) study, which found that those who imagined themselves performing a task were more likely than those who imagined others performing a task to change their behavioral intentions toward that task. Thus, one particular component of cognitive pleasure in the present study, seeing oneself in the fantasy, may affect approach responses.

Whereas there is empirical and theoretical support for the effects of sensory, affective, and cognitive components of pleasure on approach responses, no research was found that examined the effect of all three components of pleasure, at one time, on approach responses. The present study will explore the contributions of these components of pleasure in predicting the present subjects' approach responses. Research supports that, along with sensory pleasure, certain dimensions of emotional pleasure and cognitive pleasure may enhance approach responses. In particular, it was hypothesized that

H6: *Subjects' sensory pleasure, emotional pleasure, and seeing oneself in a fantasy will predict subjects' approach responses.*

METHOD

Subjects

Subjects were 145 female students representing a variety of majors at a midwestern university. Of the 145 students, 36 were involved in instrument and stimuli development and the remaining 109 were randomly assigned to four experimental treatment groups. Eighty-nine percent of subjects were between the ages of 18 and 25, six percent were between 26 and 32, and 5 percent were over 32 years of age. Ninety-one percent of the participants purchased and wore women's sleepwear products. They owned four sleepwear products on average and paid \$23.66 on average for each. This average price is similar to the price of the product in the study (\$29), which suggested that the subjects would be able to evaluate the product. Extra course credit was used as an incentive to recruit subjects.

Stimuli

Twenty subjects took part in the initial selection of a sleepwear product to be used as a stimulus. These subjects selected three styles that they liked most and thought women their age would be willing to buy from

a range of 14 catalog images of sleepwear. Another 10 subjects were given a picture of the most preferred style (satin long-sleeve top and boxer-style bottom) and six color samples. These subjects selected the product color they liked most (warm, pale yellow). The price of the product was \$29, close to the \$23.66 average paid by respondents for their own sleepwear.

A visual display expert advised in the development of three sketches of product displays incorporating the selected sleepwear. Six subjects selected the sketch that provided the most pleasant and satisfying feeling and that best helped them to conjure mental images. The preferred sketch was used as a model to construct a display in a room on campus. The display consisted of a female mannequin, a three-fold dressing mirror, two floral pillows, a white textured throw blanket, two candle holders with white candles, a vase with dried flowers, and lighting. While looking at the actual display, the same six subjects selected background music they perceived as most pleasant and appropriate (i.e., classical harp music).

These six subjects also ranked seven different scents of potpourri, identified by number only, for pleasantness and appropriateness when looking at the actual display. "*Lily of the Valley*" was rated both pleasant and appropriate for the sleepwear presentation, whereas "*Sea Mist*" was rated pleasant but inappropriate for the sleepwear presentation. This helped ensure that appropriateness was made on thematic rather than hedonic bases (Knasko, 1995). Multiingredient potpourri was used instead of a single-ingredient scent (e.g., lavender), employed in past research (Sprangenberg et al., 1996), because actual stores commonly use multiingredient fragrances.

Control of the Room Conditions and Demand Characteristics

Before the experiment, the room was deodorized to eliminate any pre-existing odor. Between treatments (one day for each treatment), the room was ventilated with fans and the apparel products were rinsed to prevent contamination of odor. Room temperature, ventilation, and lighting were monitored for consistency during the experiment. An electrical simmer pot with a small amount of potpourri was plugged in for an hour before the experiment to fill the air with a subtle fragrance. Two assistants examined the intensity of the odor in the room before the start of the experiment and then every 2 hours to assure a consistent yet subtle level of the scent.

One assistant, aware of the experimental treatments, collected all data. This assistant received training on the importance of consistency of behavior and expression to avoid response bias by subjects. The assistant was not present in the room when the subject was completing the experiment, which further decreased the chance of demand characteristics affecting subjects' responses. Subjects were debriefed in large

groups after all the data were collected. Subjects recorded their impressions of the purpose of the study. None of the subjects recognized the true purpose of the study, which further helps to ensure the absence of response bias.

Procedure

A randomized posttest-only procedure was employed with each subject exposed to one of the following treatments: (a) the garment hung on a hanger with *no display* and *no fragrance*, (b) the garment in the *display* but *no fragrance*, (c) the garment in the *display* and an *appropriate fragrance*, and (d) the garment in the *display* and an *inappropriate fragrance*.

Subjects were eliminated from the study (given a short questionnaire about attitude toward sleepwear that was not included in the data) if they listed allergies to fragrances or were found by the assistant to be wearing strong perfume. Only two subjects were eliminated because they wore a strong perfume. No subjects were aware of any temporary or permanent olfactory insensitivity, as determined by an exit question.

Similar to the atmospherics study by Donovan et al. (1994), the present study measured subjects' responses while exposed to the environment rather than depending upon recall of the experience. Subjects completed the questionnaire while exposed to sleepwear hung on a hanger or worn on a mannequin in the display. The same garment was also laid out on a table for closer inspection in the display treatments.

Instruments

Most of the scales were created by modifying existing scales reported to be reliable and valid in past research. Modifications were made in the wording of the items to make reference to the specific product (sleepwear) of the study. Two experienced researchers verified the content validity of all measures to be used in the present study.

Attitude, Purchase Intention, and Price

A global attitude measure (Engel et al., 1995), rather than a logical information-processing-based attitude measure (e.g., Fishbein multiattribute models; Ajzen & Fishbein, 1980), was selected to tap experiential aspects of attitude toward the product. Eleven-point Likert-type scales were used with four questions that addressed liking, overall evaluation, goodness, and overall liking of the product.

Eleven-point scales measured how likely one would be to buy the sleepwear and the level of agreement with the statement "I intend to buy this sleepwear" (Engel et al., 1995). The subjects wrote down the

dollar amount they were willing to pay for the product to provide supporting information about customers' purchase behavior. Subjects also estimated the price of the product with the use of a 9-point scale of dollar ranges from "\$11–15" through "above \$50."

Pleasurable Experiences

Mediating variables of pleasurable sensory, affective, and cognitive experiences were tapped with the use of 11-point scales. Subjects answered, "How much sensory pleasure did you receive from experiencing this sleepwear display?" To tap affective pleasure, subjects completed a measure consisting of 11 randomly ordered adjective pairs, five measuring level of emotional pleasure and six measuring level of emotional arousal, from the Mehrabian and Russell (1974) environmental psychology model. This measure was selected because it has been found to be valid and reliable (Donovan & Rossiter, 1982; Donovan et al., 1994; Mehrabian & Russell, 1974) and its dimensions were found to influence approach responses toward a store environment (Donovan & Rossiter, 1982). To tap cognitive pleasure from fantasy images, subjects evaluated clarity, vividness, and the level of seeing oneself in the fantasy image (Wolpin & Weinstein, 1983) on 11-point scales.

Manipulation Check of Room Conditions

An assumption of the present study was that it compared a neutral, rather than unpleasant, environment with a pleasant environment. To ensure that the room did not have adverse environmental conditions affecting subjects' responses, four questions were asked regarding perception of ambient temperature, ventilation, lighting, and smell of the room.

RESULTS

Reliability and Validity of Measures

Multiple-item measures of global attitude, purchase intention, emotional pleasure, and emotional arousal were found to have internal consistency with Cronbach alpha coefficients above 0.70 (Fraenkel & Wallen, 1993). The alpha coefficients were 0.95, 0.95, 0.83, and 0.73, respectively. Emotional pleasure and emotional arousal measures were not combined to create one measure of affective pleasure, because the alpha coefficient for the combined measure was 0.32. The three items tapping cognitive pleasure were not considered to have internal consistency, because the alpha coefficient was 0.67. As proposed, alpha co-

efficients confirmed that the two measures of affective pleasure and the three items of cognitive pleasure should be treated as separate independent variables in regression analyses for Hypothesis 6.

As a test of criterion-related validity, correlation between global attitude toward the product and purchase intention scores was run. It was assumed that a positive significant correlation between attitude and behavioral intentions would provide validity for the attitude measure. Pearson's correlation between attitude and purchase intention ($r = 0.70$, $p < .01$) illustrated that the global attitude measure was valid. As stated, measures of the emotional pleasure and emotional arousal (Mehrabian & Russell, 1974) have been found to be valid and reliable (Donovan & Rossiter, 1982; Donovan et al., 1994; Mehrabian & Russell, 1974).

Effect of Atmospherics on Approach Responses and Pleasurable Experiences

Attitude, Purchase Intention, and Price. ANOVA (see Table 1), revealed that two of the four approach responses were affected by the treatments, and one variable approached statistical significance. Purchase intention and price the subject was willing to pay for the product were statistically significant at the $p < .05$ level, whereas global attitude toward the product approached significance ($p = .052$). Post hoc comparisons of the means (see Table 2) of these three approach responses were examined to test Hypotheses 1, 2, and 3 with the use of a $p \leq .05$ significance level. Tukey's-Least Significant Difference test was selected for post hoc pairwise comparisons because of differences in sample size among treatments. ANOVA revealed that estimated price of the

Table 1. ANOVA Results for Display and Fragrance Treatments on Approach Responses and Pleasurable Experiences

Source of Variation	<i>df</i>	<i>F</i>
Global attitude/product	(3,103)	2.66
Purchase intention	(3,103)	2.86 ^a
Estimated price	(3,103)	1.63
Price willing to pay	(3,100)	3.65 ^a
Sensory pleasure	(3,103)	7.85 ^c
Emotional pleasure	(3,103)	4.59 ^b
Emotional arousal	(3,103)	1.12
Clarity	(3,82)	1.01
Vividness	(3,82)	0.67
Oneself in fantasy	(3,82)	4.53 ^b

^a $p < .05$.

^b $p < .01$.

^c $p < .0001$.

Table 2. Post Hoc Comparisons of Means for Statistically Significant Differences in Approach Responses and Pleasurable Experiences

	Means			
	No Display, No Fragrance	Display, No Fragrance	Display, Appropriate Fragrance	Display, Inappropriate Fragrance
Global attitude/product	3.11 ^a	3.71	4.09 ^a	3.59
Purchase intention	1.76	1.40 ^a	3.12 ^{ab}	1.11 ^b
Price willing to pay (\$)	23.70 ^{ab}	28.48 ^a	29.62 ^{bc}	24.82 ^c
Sensory pleasure	1.54 ^{abc}	2.70 ^a	3.43 ^b	3.10 ^c
Emotional pleasure	1.97 ^{ab}	2.34 ^c	3.11 ^{ac}	2.92 ^b
Oneself in fantasy	1.83 ^a	2.80 ^b	3.75 ^{ac}	1.21 ^{bc}

Note. Means having the same superscript (a, b, c) are significantly different at $p < .05$ according to LSD test.

product was not statistically significant and therefore was not included in the post hoc comparisons of means.

H1: Impact of a Display on Approach Responses toward the Product. In H1 it was proposed that placing the product in a display will enhance approach responses toward the product. H1 received partial support. In support of this hypothesis, placing the product in a display significantly enhanced the price subjects were willing to pay for the product ($X = 28.48$) over the product not in a display ($X = 23.70$). Placing the product in a display did not significantly enhance global attitude toward the product ($X = 3.71$) and purchase intention ($X = 1.40$) when compared to the product not in a display ($X = 3.11$; $X = 1.76$, respectively), however.

H2: Impact of a Display with a Pleasant Environmental Fragrance on Approach Responses toward the Product. It was hypothesized that the displays with the pleasant environmental fragrances would enhance subjects' approach responses toward the product over the product alone or display alone. In order for H2 to be supported, both pleasantly fragranced (appropriate and inappropriate) displays would have had to significantly enhance approach responses toward the product. This was not the case. The pleasantly and appropriately fragranced display did have a significant impact on the three approach responses when compared to the product alone or the display without the fragrance, but the pleasantly but inappropriately fragranced display did not produce similar results. Therefore, the results failed to support H2, but the significant results for the appropriately fragranced display provide support for H3.

H3: Impact of a Display with a Pleasant and Appropriate Environmental Fragrance on Approach Responses toward the Product. H3 proposed that the appropriate environmental fragrance would enhance approach responses toward the product more than would the inappropriate environmental fragrance. H3 received support for two of the three approach responses. When compared to the display with the pleasant yet inappropriate fragrance ($X = 1.11$), the pleasantly and appropriately fragranced display ($X = 3.12$) had a significant impact on purchase intention. The same was true for price the subjects were willing to pay for the product; subjects were willing to pay an average of \$29.62 for the product in the appropriately fragranced display as compared to \$24.82 for the product in the inappropriately fragranced display. However, means for the appropriately fragranced ($X = 4.09$) and inappropriately fragranced ($X = 3.59$) displays were not significantly different for one approach response: global attitude toward the product.

Whereas H3 focused on the two displays with fragrances, the positive influence of the appropriately fragranced display is further supported by comparing it with the other two treatments. The display with the pleasant and appropriate fragrance ($X = 4.09$) significantly enhanced global attitude toward the product when compared to the product alone ($X = 3.11$). In addition, the appropriately fragranced display ($X = 3.12$) had a significant impact on purchase intention when compared to the display without the fragrance ($X = 1.40$). Subjects were also willing to pay more for the product in the appropriately fragranced display ($X = 29.62$) than they were for the product not in a display ($X = 23.70$).

Significant differences between treatments that provide support for H1 and H3 do not create a uniform pattern across approach response. However, the pleasantly and appropriately fragranced display treatment was significantly better than at least one of the other treatments for each approach response. The pleasantly and appropriately fragranced display treatment resulted in the highest means for all three approach responses, which supports the importance of appropriateness of the environmental fragrance in generating approach responses. The combination of product, display, and fragrance must be carefully constructed to have the most positive effect on subjects' global attitude toward the product, willingness to purchase, and the amount subjects are willing to pay for the product.

Pleasurable Experiences

Pleasurable experience during shopping or projected experiences involving the use of the product following purchase may be responsible for the enhanced approach responses. Results provide support for the influence of atmospherics on pleasurable sensory, affective, and cognitive experiences.

H4: Impact of a Display on Sensory and Affective Components of Pleasure. H4 proposed that placing the product in a display would increase sensory pleasure and affective pleasure. Sensory pleasure was significantly affected by the treatment ($p < .0001$). Subjects reported more sensory pleasure from the display with the appropriate fragrance ($X = 3.43$), with the inappropriate fragrance ($X = 3.10$), or no fragrance ($X = 2.70$), than they did from the product alone ($X = 1.54$).

Emotional pleasure was also significantly influenced by the treatment ($p < .01$), but emotional arousal was not significantly affected ($p > .05$). The product in the display with the appropriate fragrance produced the most emotional pleasure ($X = 3.11$) and this result was significantly different from levels of emotional pleasure produced by the product alone ($X = 1.97$) and the display with no fragrance ($X = 2.34$). The product in the display with the inappropriate fragrance ($X = 2.92$) was also significantly better than the product alone at enhancing emotional pleasure.

H5: Impact of the Appropriateness of Environmental Fragrancing for the Display on Cognitive Pleasure. H5 proposed that the display with the appropriate environmental fragrance would enhance cognitive pleasure over the display with the inappropriate fragrance. Clarity and vividness of a fantasy image were not significantly affected ($p > .05$) by the treatments, but level of experiencing oneself in the fantasy image was significantly affected ($p < .01$) by the treatments. As in all the significant results of this study, the product in the display with the appropriate fragrance ($X = 3.75$) produced the most positive effects. This treatment generated significantly different results from those of the product alone ($X = 1.83$) and the product in the display with the inappropriate fragrance ($X = 1.21$) at helping subjects see themselves in the fantasy image. The inappropriate fragrance appeared to disrupt the formation of a fantasy image; even the display without a fragrance ($X = 2.80$) had a significant effect over the display with the inappropriate fragrance in helping subjects see themselves in the fantasy image. Hence, it appears that the display with an appropriate fragrance had the greatest influence on pleasurable experiences.

The results of ANOVA and the comparison of means provide partial support for H4 and H5. In support of H4, atmospherics enhanced variables of sensory pleasure, emotional pleasure, and experiencing oneself in the fantasy image. The product in the display with the appropriate fragrance resulted in the highest level of the cognitive pleasure variable, experiencing oneself in the fantasy image, which provides support for H5. The next step was to determine if pleasurable experiences mediated approach responses.

Mediating Effect of Pleasurable Experiences on Approach Responses

H6: Sensory, Affective, and Cognitive Components of Pleasure Predicting Approach Responses. H6 proposed that sensory pleasure, emotional pleasure, and seeing oneself in a fantasy would predict subjects' approach responses. Results of regression analyses provided partial support for H6. Results show that subjects' scores on components of pleasure predicted their global attitude scores ($R^2_{\text{adj}} = 0.39$, $F(6, 106) = 12.78$, $p < .001$) and purchase intention scores ($R^2_{\text{adj}} = 0.45$, $F(6, 106) = 16.13$, $p < .001$). However, subjects' scores on components of pleasure did not predict the price subjects were willing to pay for the product ($R^2_{\text{adj}} = 0.04$, $F(6, 103) = 1.73$, $p = .12$). R^2_{adj} values for global attitude toward the product (0.39) and purchase intention (0.45) show that pleasure components explained a fair amount of variance.

Components of pleasurable sensory, affective, and cognitive experience (sensory pleasure, emotional pleasure, emotional arousal, clarity, vividness, and seeing oneself in the image) were the independent variables in the regression equations. It was hypothesized that sensory pleasure, emotional pleasure, and seeing oneself in the fantasy were the components that would best predict the three approach responses. As hypothesized, a component of the cognitive pleasure variable of seeing oneself in the fantasy image ($B = 0.28$, $p < .001$) and sensory pleasure ($B = 0.23$, $p < .005$) predicted subjects' scores of global attitude toward the product. Participants' ability to envision themselves in the mental image stimulated by the display and/or apparel product was most strongly related to attitude toward the product, followed by the effect of sensory pleasure on attitude toward the product. Seeing oneself in the fantasy image ($B = 0.54$, $p < .001$) and sensory pleasure ($B = 0.27$, $p < .05$) also predicted subjects' scores on purchase intention. Participants who envisioned themselves in the fantasy image and received sensory pleasure from the product and/or display were more willing to purchase the apparel product. These results support past research (Bone & Ellen, 1992; MacInnis & Price, 1987) concluding that experiencing oneself in the image enhances the likelihood of approach responses. Whereas a component of cognitive pleasure and sensory pleasure predicted two measures of approach responses, emotional pleasure did not predict any of the three measures of approach responses. Therefore, H6 received partial support.

Room Conditions

ANOVA and post hoc comparison of means were performed to ensure that both scent treatments were perceived to be pleasant, that none of the unscented treatments were perceived to be unpleasant, and that

Table 3. ANOVA Results for Room Conditions

Source of Variation	<i>df</i>	<i>F</i>
Smell	(3,103)	8.87 ^c
Lighting	(3,103)	0.56
Temperature	(3,103)	5.54 ^b
Ventilation	(3,103)	3.29 ^a

^a*p* < .05.^b*p* < .01.^c*p* < .0001.

other room conditions, such as temperature, did not produce a confounding effect on the treatments. Perceived smell ($p < .0001$), temperature ($p < .01$), and ventilation ($p < .05$) of the room were significantly different (see Table 3). Post hoc comparison of means (Table 4 shows there was no significant difference in pleasantness between the appropriate ($X = 3.24$) and inappropriate fragrance ($X = 3.00$) treatments, as planned, and these treatments were significantly more pleasant than the nonscented product without a display ($X = 1.23$) or with the display ($X = 0.89$), as expected, but all treatments had a neutral to pleasant odor. These results help verify that (a) *appropriateness* of the fragrance affected differences in responses created by the two fragranced treatments, (b) the fragranced treatments were more pleasant than the unscented room, and (c) responses were not affected by a perceived negative ambient smell.

The mean scores for temperature and ventilation were also above the neutral score of zero, which indicates that these conditions were perceived to be neutral to pleasant, avoiding a possible confounding effect created by unpleasant ambient room conditions. There were significant differences in perceptions of ambient room conditions, possibly due to the uncontrollable variations in humidity. A more plausible explanation is that the pleasantness of the fragrances might create a halo effect, leading to better evaluations of ventilation and temperature. The order

Table 4. Post Hoc Comparisons of Means for Statistically Significant Differences in Room Conditions

	Means			
	No Display, No Fragrance	Display, No Fragrance	Display, Appropriate Fragrance	Display, Inappropriate Fragrance
Smell	1.23 ^{ab}	0.89 ^{cd}	3.24 ^{ac}	3.00 ^{bd}
Temperature	3.16 ^a	1.93 ^{abc}	3.83 ^b	3.75 ^c
Ventilation	1.16 ^{abc}	2.52 ^a	3.00 ^b	2.55 ^c

Note. Means having the same superscript (a, b, c, d) are significantly different at $p < .05$ according to LSD test.

of the means supports this explanation; the fragrance treatments have higher ratings on temperature and ventilation than do the unscented treatments, and the appropriately fragranced treatment shows the highest ratings for temperature and ventilation as well.

CONCLUSIONS

Effectiveness of Atmospheric as a Marketing Tool

The present study provides partial support for the effectiveness of the retail environment or atmospheric (Kotler, 1973–1974) as a marketing tool to affect responses toward a product. In particular, the present study found that treatments consisting of a pleasure-oriented product display and environmental fragrancing resulted in statistically significant differences for purchase intention and price subjects were willing to pay for the product, whereas attitude toward the product approached significance. The treatments did not have a significant effect on estimated price of the product.

However, contrary to limited past research (Ko & Rhee, 1994) and common belief by merchandisers (Cahan & Robinson, 1984; Mills et al., 1995), the present findings suggest that the product display alone may have little effect as a marketing tool to increase revenue through increased product sales. Results of the present study show that placing the product in a display only enhanced price willing to be paid for the product, but did not significantly enhance global attitude or purchase intention. One must keep in mind a limitation of the present study; the product display was not part of an actual retail setting.

Adding a pleasant but inappropriate environmental fragrance to the display did not statistically improve approach responses as compared to the product alone or the product in the display without an environmental fragrance. Therefore, the present study does not support H2, which states that pleasantness of an environmental fragrance will enhance approach responses. In addition, the results do not support the suppositions of H2 that the pleasure-oriented nature of the product and the monetary cost of the product explicate inconsistent findings of past environmental fragrancing research (Hirsch, 1995; Knasko et al., 1990; Sprangenberg et al., 1996). Again, one is alerted to a limitation of the present study; environmental fragrancing was not applied to an actual retail setting.

The present results illustrate that there may be another aspect of fragrance at work, appropriateness of the fragrance, that may explicate inconsistent findings of past environmental fragrancing research. Of the four treatments, it appears that the most significant effect was created by placing the product in a display with an appropriate environmental fragrance. The addition of a pleasant *and* appropriate fragrance to the

product display resulted in statistically significant increases in and the highest levels of attitude toward the product, purchase intention toward the product, and price the subjects were willing to pay for the product. These results support that adding a pleasant and appropriate environmental fragrance to a display is necessary to produce significant differences in approach responses toward the product, including those responses most important to retailers: purchase intention and price willing to be paid.

Effect of Atmospheric on Sensory Pleasure and Affective Pleasure

Sensory, affective, and cognitive pleasure result from positively evaluated (a) stimulation of the senses, (b) arousal or expression of emotions, and (c) understanding or creation of symbolic content (e.g., creation of a fantasy image) for nonutilitarian purposes, respectively (Fiore & Kimle, 1997). Atmospheric, represented by the display and environmental fragrance treatments, did affect sensory pleasure as well as components of affective pleasure (emotional pleasure) and cognitive pleasure (seeing oneself in the fantasy). Whereas sensory and emotional aspects of atmospheric have been the focus of past research (e.g., Bellizzi & Hite, 1992; Donovan & Rossiter, 1982; Sprangenberg et al., 1996), the present study advocates that the role of atmospheric in creating cognitive pleasure should not be overlooked.

As hypothesized, the present study supports the contributions of the display with or without an environment fragrance on sensory pleasure. It appears that the qualities of the display's props, music, and lighting enhanced sensory pleasure, similar to the effect found in past research for aspects of the general retail environment (e.g., Baker et al., 1992; Milliman, 1982). Whereas the appropriately fragranced display resulted in the highest level of sensory pleasure, followed by the inappropriate fragrance, these levels were not significantly different from the level generated by the display alone. These results illustrate that the presence of a pleasant environmental fragrance may contribute to the sensory experience, but the intensity of the fragrance may not be strong enough to produce a statistically significant increase in sensory pleasure. The fragrance was strong enough to influence affective pleasure; the addition of environmental fragrancing to the display was required to produce statistically significant increases in emotional pleasure over the product alone. Again, the appropriately fragranced display produced the highest level of emotional pleasure and was significantly different from the level generated by the display alone.

Appropriateness and Cognitive Pleasure

Appropriateness pertains to congruity between perceptions of what is found in the environment (display) and the mental representations of

the environment stored as cognitive schemas. Appropriateness or congruity refers to a high level of fit between how the product display is perceived and what is expected according to stored information about product displays for sleepwear or about past experiences similar to that contrived by the scenario of the display. As proposed, results suggest that cognitive pleasure was strongly affected by the congruity between the environmental fragrance and the display. The appropriately fragranced display produced the highest level of the cognitive pleasure variable—seeing oneself in the fantasy—and produced a significant increase in this variable over the product alone. In addition, of all four treatments, the inappropriately fragranced display produced the lowest level of seeing oneself in the fantasy.

The present findings augment empirical support (Bone & Jantrania, 1992; Mitchell et al., 1995) for the positive effect of congruity of odor on consumer behavior. However, the focus of the past research has been on odors emitted by the product. The present findings suggest that appropriateness of fragrance is not limited to the constituent odor emitted by the object or product. Congruity may be based on past experience with scents added to an environment.

Mediating Factors to Approach Responses

Seeing oneself in a fantasy involving the product, a component of cognitive pleasure, was the most significant predictor of attitude toward the product and purchase intentions. Sensory pleasure was also a significant predictor of attitude toward the product and purchase intentions. These two independent variables were hypothesized as predictors of approach responses. Previous studies (Eckman, Damhorst, & Kadolph, 1990; Morganosky, 1984; Zukerman, 1979) found that tangible qualities (e.g., color, pattern, styling, fabrics) of an apparel product were of primary importance in product selection, purchase decision, or dollar amount subjects willing to spend on a product. These studies are supported by the positive relationship between sensory pleasure and approach responses toward apparel products found in the present study, but this body of past research did not take into account the effect of pleasurable cognitive experiences associated with the product. The results of the present study suggest that the cognitive experiences associated with the product were even more important than the tangible qualities of the product in shaping customers' purchase decisions. This supports the Hirschman and Holbrook (1982) proposition that intangible qualities of the consumption experience may be key contributors to product selection and purchase decision. The present study emphasizes that the promotional environment (the display and environmental fragrancing) helps the subject create these intangible qualities through fantasizing about personal use of the product.

FUTURE STUDIES

Past research (Baker et al., 1992; Donovan & Rossiter, 1982), concluded that high levels of the two components of affective pleasure (emotional pleasure and emotional arousal) resulted in significant effects on approach responses. This was not supported by the present study. Future research may examine whether arousal level associated with product type influences the level of arousal created by atmospherics that best affects approach responses toward the product. Perhaps high arousal is more effective in creating approach responses for high-arousal products (e.g., active sportswear or sports cars) than for low-arousal products (e.g., flannel robes or economy cars). The appropriate emotional arousal level associated with use of satin sleepwear may vary widely by subject. Some may associate satin sleepwear with low-arousal activities of rest and relaxation, whereas others may associate satin sleepwear with high-arousal romantic interludes. Thus, the varying level of arousal associated with the product in the present study may have produced a confounding effect.

Future studies may also examine the mechanism responsible for cognitive pleasure from atmospherics. Cognitive pleasure may be due to a number of mechanisms: fit of information to the schema (Zusne, 1986), resolution of moderate incongruity of information (Mandler, 1982; Meyers-Levy & Tybout, 1989), or creation of symbolic content such as mental imagery, daydreams, and fantasies. In addition, cognitive pleasure may be augmented by the symbolic content of the mental image itself. Whereas MacInnis and Price (1987) cautioned that it is difficult to disentangle the positive effects of cognitive processes and the content of the image, this line of research should be addressed.

Cognitive processes and individual differences of consumers may influence the effect of atmospherics on approach responses. Gulas and Bloch (1995) pondered the effect of environmental fragrancing on consumers who were highly involved in information processing. Perhaps consumers are less involved in experiential aspects and more involved in information-processing aspects of cognitive processes when purchasing utilitarian products (e.g., work boots, motor oil, gardening tools), resulting in a diminished effect of atmospherics on approach responses. Yet, research illustrating that store environment influences perceptions of variety and quality of merchandise and value for the money (Donovan et al., 1994) suggests that atmospherics may induce approach responses due to positive outcomes of information processing. Research should examine the effect product type has on engaging cognitive processes (i.e., experiential and information processing), the role atmospherics plays in these cognitive processes, and the results on approach responses.

The environment-behavior paradigm concludes that a combination of person variables and environmental variables affects behavior

(O'Neill & Jasper, 1992). Swinyard (1993) showed that the influence of the store experience on shopping intention may have been magnified by a consumer's level of shopping involvement and mood. Individual differences (person variables), such as atmospheric responsiveness (Grossbart et al., 1990), shopping enjoyment (Bellenger & Korgaonker, 1980), imagery ability (Gilbert, Voss, & Kroll, 1997; MacInnis & Price, 1987), and preference for imagery (Bone & Ellen, 1992) that might mediate the effect of atmospherics on approach responses were not examined. These variables represent consumption orientations that have affected consumer behavior. Future studies may examine whether these individual differences mediate the effect of atmospherics on approach responses.

MARKETING APPLICATIONS

The present research suggests that using an environmental fragrance with a product display may enhance the sale and profit margin of certain products. However, one must be careful to select a pleasing and appropriate fragrance for the product display. Stores generally contain many products in close vicinity to one another, which may result in a negative effect if the fragrance permeates a large area with a variety of products that are perceived to be inappropriate for the fragrance. For example, research (Fiore & Kim, 1997) found that particular feminine fragrances were perceived as inappropriate for creating a professional appearance for women. If these fragrances, used in a lingerie section of a store, permeate the career wear section, they may negatively affect sales of the career wear products. An effort must be made to contain the fragrance by using small amounts of the fragrance and determining if the air-flow pattern in the store creates the undesirable permeation of fragrance. One must also be cautioned that a small number of consumers may have allergic reactions to particular fragrance ingredients that may result in avoidance of the product or store.

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