Social Interaction and Personal Fragrance Use:

A Summary of Research Conducted for the Fragrance Research Fund

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Despite the widespread use of personal fragrances and their assumed influence on social behavior, there has been little research documenting such influence. The goal of the proposed study was to provide such documentation, to understand the role fragrances play in determining social behavior.

The study had three components. The first was a data set describing people's daily patterns of social interactions. The second consisted of descriptions of their perceptions of different fragrances, measures of their attitudes toward fragrance use, descriptions of their reasons for fragrance use, and summaries of their past and present use of personal fragrances. The third component consisted of various measures of individual differences in interpersonal style, psychological traits, and other factors.

These components were chosen to answer questions of interest in two broad categories: what are the relationships between fragrance use and perceptions and social behavior, and what are the relationships between fragrance use and perceptions and individual psychological differences?

Previous Research

A literature review of the major psychological journals did not find any research demonstrating relationships between odors (scents, fragrances, etc.) and social behavior. Aside from the large body of research on olfaction per se, the topic has not received much attention from psychologists.

The Fragrance Research Fund

This article is an informal description of one of the research projects supported by The Fragrance Research Fund. This fund has as its main objective the financing of research related to the impact of fragrances in humans.

It studies the sense of smell and human reaction to olfactory stimulation. The research is of an interdisciplinary nature, including anatomatical and ultrastructural observations, physiological and biochemical studies as well as psychological and behavioral reactions to fragrance.

This research is expected to clarify how fragrances operate and how they impact, via the central nervous system and hormonal mediators, on moods, mental attitudes and general physical health.

The President of The Fragrance Research Fund is Dr. Jack Mausner, Senior Vice President Research and Development, Chanel, Inc. For further information on the research and educational activities of the Fragrance Research Fund and of the Fragrance Foundation contact: Annette Green, The Fragrance Foundation, 142 East 30th Street, New York, NY 10016, USA.

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However, some data suggest an influence of odors on human behavior. For example, Helen Keller could allegedly distinguish visitors on the basis of smell (as reported in Bermont & Davidson, 1974).

McClintock (1971) found that the menstrual cycles of women living in the same dormitory became more synchronized over time, although it is not certain what (if any) specific scent was responsible for these results. Morris and Udry (1978) also found that 20% of the couples in their study reported increased sexual activity during evenings in which the women had applied copulins on their chests. These data are suggestive, but far from conclusive.

Present Study

The study described here was correlational in nature, the variables examined were not manipulated. It was not possible to formulate formal hypotheses or conduct experimental studies on fragrance use and social interaction because of the lack of existing theory or previous research. This study focused on collecting information about the actual relationships between social behavior and fragrance use.

Approximately 125 undergraduates (males and females) were selected from a sample of over 1,000 students. Three groups of approximately 40 subjects each were selected on the basis of self reported frequency of fragrance use. Groups were composed of individuals who identified themselves as: 1) daily users of fragrance, 2) Special occasion only users, and 3) those who rarely or never used fragrance products.

Participants were instructed on use of a variant of the Rochester Interaction Record (Wheeler & Nezlek, 1977; Nezlek, et al., 1983). They completed the diary record at the end of each day for a period of two to three weeks. The RIR is a self-report diary that enables participants to record, rate, and describe each social interaction they have that lasts ten minutes or more.

The diary provides a variety of indices describing both the qualitative and quantitative aspects of the social lives of participants. These include measures of frequency of different types of contacts, e.g. same vs. opposite sex contact and measures of reactions to, and perceptions of social events. In the present study these manners included: intimacy, satisfaction, influence, initiation, and confidence. In addition, measures of the frequency of use, awareness of, and perceived influence of fragrance products on each interaction were also obtained.

Subjects were interviewed individually at the end of the study. The interview included demographic information as well as a number of questions designed to determine the accuracy and validity of each subject's diary record.

Participants also completed a variety of question-

naires including measures of: physical health and well-being, loneliness, sex role identity, social competence, body-image/appearance attitudes and behaviors, social skills, emotional responsiveness, fragrance use/awareness, public and private self-consciousnes, introversion-extraversion, interpersonal style, and family interaction.

Conclusions

- 1. Fragrance use, defined as the belief that others are aware of fragrances one is wearing, is not, in and of itself, related to social behavior. This held true when considering both quantitative and qualitative aspects of interaction.
- 2. How favorable one believes others perceive the fragrances one is wearing is related to the affective reactions experienced in social interaction. In general, the more positively one assumes others perceive one's personal fragrance to be, the more positively one evaluates social interaction along other dimensions.

Confidence in social interaction was found to have the strongest association with fragrance favorability. The better one thinks others perceive one's fragrances, the more confident one is. This relationship varies in strength depending upon the type of social interaction and the sex of the person being considered. Fragrance favorability is more salient in opposite sex than in same sex interaction, and particularly for women in intimate opposite sex contact.

3. The perception of fragrances in social interaction is mediated by factors other than the simple presence or absence of fragrances. Although women use more fragrances than men there are no differences between the sexes in how often and in how favorably they believe others perceive their fragrances.

The assumption that one's fragrance has been noticed is probably a function of cognitive factors such as expectations or the focus of attention; motivational factors such as a desire to believe that another is sensitive to one's fragrances; and behavioral factors such as the activity in which one is engaged, e.g., a date vs. eating together. Before conclusions can be drawn about why fragrances have an impact, the dynamics of social fragrance perception need to be understood more fully.

4. The causal relationship between fragrance perception and other interaction characteristics is not known at this time. The present results strongly suggest a positive relationship between confidence and the favorability with which others are assumed to perceive one's fragrance.

This positive relationship may be the result of three different causal models: Favorability may lead to confidence—a belief that others enjoy your fragrance may enhance your self image. Confidence

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may lead to a belief that others enjoy your fragrance—a positive self image may extend to ones fragrance. Confidence and assumed favorability may jointly stem from another aspect of interaction—a social event goes exactly as planned, generating a "halo" effect that encompasses all aspects of the event. Answers to questions such as these will need further work, perhaps using experimental designs.

5. Measures of individual differences indicated that high and medium groups of female fragrance product users score higher than infrequent users on measures of self-esteem, attention to body image, social expressiveness, social skills, emotional intensity and androgynous sex role values. High and medium level male fragrance product users score higher than infrequent users on measures of attention to body image, emotional expressiveness, social expressiveness, and social skills.

High frequency fragrance product use is associated with higher levels of social skills, self-acceptance, assertiveness, concern with appearance and a positive outlook on life. High frequency users also tend to enjoy socializing more, to be better listeners, to initiate and communicate more effectively and to be more concerned with the appropriateness of their own and other's behaviors than low frequency users. These findings indicate that frequency of fragrance product use is associated with a number of positive personality attributes, values, and social behaviors.

References

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