Fifteen males and fifteen females in each of three age groups (children, adolescents, and adults) described a stimulus photograph for up to five minutes. These descriptions were transcribed and scored for the frequency of both language form and content categories. Analyses revealed significant sex differences in both the form and the content of spoken language. No evidence was found for the contention that sex-typed speech develops differently in male and female children. There were, however, significant age differences in speech form and content, independent of sex.

THE USE AND DEVELOPMENT OF SEX-TYPED LANGUAGE

The suggestion that English usage varies with a speaker’s sex has recurred throughout the study of language. Early approaches to such sex differences are exemplified by the work of Jespersen (1922) who, after reviewing old ethnographies and the works of authors such as Dickens, Moliere, and Shakespeare, reached numerous conclusions concerning the content and delivery of women’s spoken English. Among these were the notions that women spoke more rapidly and more euphemistically than men, and more frequently used run-on sentences.
Jespersen also posited that women have less extensive vocabularies than men and as a consequence must repeatedly employ a few adjectives, primarily “nice” and “pretty,” and must resort to intensive adverbs such as “vastly,” “awfully,” “quite” and “so.” Jespersen traced these differences to the disparate activities, roles and ranks of the sexes.

More recent authors, after reviewing language sources similar to those used by Jespersen, have reached very similar conclusions. Pei (1970) described women’s speech as characterized by the use of abbreviated, diminutive and euphemistic words such as “hanky,” “panties,” “derriere,” “powder room,” as well as by the use of extravagant adjectives like “wonderful,” “adorable,” “dreamy,” and “sensational.” Key (1975) reviewed the linguistic literature and concluded that relative to men, women use more intensifiers (e.g., so, such, quite, vastly) and employ adjectives which emphasize femininity (e.g., adorable, bubbly, cute, precious, sweet). Lakoff (1975), after observing her own speech and that of acquaintances, characterized women’s spoken language as containing requests (rather than commands), euphemisms, specific adjectives such as “adorable,” “charming,” “divine,” and “lovely,” and shortened (“tag”) questions added to the ends of statements, as in “It’s raining outside, isn’t it?”

Thus, examination of the speech of women characters in novels by men, reviews of the linguistic literature, and casual observations of women’s verbal behavior have all generated a specific picture of the form of women’s verbal behavior. This sex-typed speaking style would consist of questioning, euphemistic statements, and a high frequency of “feminine” adjectives and intensive adverbs, and would be readily identifiable to others as female.

In investigating what verbal behavior is classified as women’s speech, Kramer (1974) had both male and female students identify the sex of speaker for 49 captions taken from New Yorker magazine cartoons. Although the captions were presented without their accompanying cartoons, there was a consensus (at least 66 percent agreement) as to speaker sex. Upon further questioning, subjects reported assigning speaker sex on the basis of particular word cues, such as the use of swear words by males, and preference for words such as “nice” and “pretty” by females.

Approaching the identifiability of a women’s register still more directly, Edelsky (1976) selected twelve language variables (e.g., the use of “adorable,” “damn,” and tag questions), that had been hypothesized to differentiate between the speech of males and females, and systematically varied these components in a series of 24 statements. English-
speaking adults and children were then asked to identify the sex of the person most likely to make each statement. Adults identified speaker sex with near unanimity and acknowledged knowing the male and female language stereotypes. The children’s assessments of speaker sex, however, increased in consistency with age.

Together, the studies of Kramer (1974) and Edelsky (1976) suggest that certain aspects of speech can be labelled as appropriate for either females or males. However, neither study provided information on the situations in which such speech patterns were actually employed.

Early investigations of actual sex differences in speech focused on conversational content. Moore (1922), for example, recorded bits of audible conversation while strolling up Broadway from 37th St. to 55th St. and documented differences in conversational content. The topics of money and business dominated male-to-male conversations, followed in decreasing order by amusement, persons of the same sex, persons of the opposite sex, and clothing, buildings and decoration. Women, on the other hand, spoke to each other primarily of men, and secondarily of clothing, building and decoration, women, amusement, and business. Analogous sex differences in conversational content were found by Landis and Burtt (1924), in a study using similar procedures.

Recently, in similar and better controlled studies, sex differences in both content (topic) and form (word use) have also been found. In a normative study of verbal behavior by Gleser, Gottschalk and Watkins (1959), for example, subjects were required to speak for five minutes on an interesting or dramatic life experience. Women were found to use significantly fewer words referring to spatial relations, quantity and destruction, than did males. Interestingly, there were no sex differences in the use of form categories such as adjectives, adverbs or interjections—the form characteristics believed to be an integral part of a female register.

More recently, Swacker (1975) recorded college students’ descriptions of three sixteenth-century graphics in open-ended sessions, and reported a number of sex differences. One major difference was in verbosity; men spoke longer than did women, although there was no difference in the rate of their discourse. Further, women more often employed conjunctions as topic shift markers whereas men used interjections. Additionally, males tended to exactly quantify their descriptions, frequently attempting to count the number of objects in the drawing rather than estimating these numbers as did females.

In related research examining sex-typed language use in children, Sause (1976) found that kindergarten boys spoke more about space,
quantity, and good versus bad, while girls spoke more of the female role. Similarly, Haas (1979) reported that among four, eight and twelve-year-old children in same-sex and mixed-sex dyads, boys spoke more about location and sports and provided information, whereas girls spoke more of school and provided support for others’ statements and actions.

Thus, the existence of sex differences in speech has been supported by a number of studies. In terms of content, males appear to speak of space, location, exact quantity, sports and goodness and badness, while females reportedly speak of school, the female role, feelings, emotions and support. In terms of form, males reportedly choose interjections to shift topics, while females use conjunctions. None of these differences, however, clearly document the actual use of the “feminine” language posited by Jespersen (1922), Key (1975) and Lakoff (1975), or the female register studied by Kramer (1974) and Edelsky (1976).

In further studies, numerous authors have examined the importance of the speaker’s relative situational status and role in determining female register use (see, for example, Brouwer, Gerritsen & deHaan, 1979; Crosby & Nyquist, 1977; McMillan, Clifton, McGrath & Gale, 1977; O’Barr & Atkins, 1980). In general, these studies support Kramer’s (1981) contention that compared to higher status speakers, individuals who lack importance within a situation will employ verbal strategies incorporating the female register.

Finally, even less understood than sex differences in language use per se are aspects of the development of sex-typed language in children. For example, if sex-typed language reflects relative power or status, then children’s speech should contain more elements of the “female” register. Such a hypothesis might further clarify Lakoff’s (1975) contention that children of both sexes initially develop “women’s language,” but that boys between age five and ten years gradually begin to substitute other “non-feminine” forms of expression for their original speaking patterns. However Haas (1979), in a developmental study of gender-associated speech, was unable to substantiate this proposed pattern of development. Rather, she reported that language developed similarly for both sexes in the four, eight and twelve-year-olds she studied, with no clear change in sex-related language features with age. Thus, a pattern of sex-typed language development in children has not yet been established.

The present study was undertaken to address three issues raised by the sex-typed language literature. First, do women and children employ the female register to a greater extent than do others when speaking in a relatively status free situation? Second, does the use of sex-typed language change systematically as a function of age? Third, in a relatively status-free situation, does verbal content vary with speaker sex and age?
METHOD

Subjects

Subjects for this study were 15 males and 15 females at each of three age levels: eight to nine years (children), 14 to 15 years (adolescents) and 18 to 36 years, with a median age of 21 years (adults). Adults were recruited from an Introductory Psychology class at the University of Manitoba. The children and adolescents were selected from grades three and nine respectively, in schools located in middle-class areas of the city. All minors for whom informed parental consent had been obtained participated in the study, constituting more than 95% of each group sampled. Only those subjects for whom English was the first language and who spoke for at least one minute were included in the final data analysis. Data from two adults and one child were excluded on the basis of the language criteria, while data from one adolescent and one child were excluded on the basis of the time criteria. The adolescent recorded only his age and sex, while the child said nothing during the taping session.

Procedure

All subjects were asked by the first author to describe a stimulus picture. These descriptions were tape recorded while each subject was alone in a small room. Adult subjects were recorded at the university, while adolescents and children were recorded at their respective schools. All participants were told that speaking and conversational habits were being studied and were asked to speak for a full five minutes. Only the speaker’s sex, age, and verbal description were recorded. All speakers were assured of the anonymity of both the tape and its later transcription. Subjects were left alone during recording, thus minimizing role and status cues which could influence their use of sex-typed language. In order to facilitate verbal behavior, a timer was set to ring at the end of the five minute interval and three written cue questions were left with all subjects. The questions asked them to discuss: 1) what they saw in the picture, 2) what the picture made them think of, and 3) whether they did or did not like the picture, and why or why not. Prior to taping, the task was explained to each subject until he/she indicated complete understanding.

Stimulus

Subjects were presented with an 8½ × 11 inch color photograph of the Grandma Moses painting, “The Storm.” This painting depicts a rural scene in
which a farm is being readied for an oncoming storm. The picture contains three buildings, 11 adults (three female, eight male), two children (one boy, one girl), and five animals (four horses, one dog), and was chosen because of the diversity and familiarity of its content.

Scoring

All verbal samples were transcribed from the tape and scored for occurrences of eight form categories and fourteen content categories. The form categories assessed word choice, and thus, in keeping with the proposals of Jespersen (1922), Key (1975), Swacker (1975) and others, each verbal sample was scored for the frequency of "feminine" adjectives (e.g., nice, pretty, sweet, charming), intensive adverbs (e.g., so, very, vastly), qualifiers (e.g., maybe, sort of, I guess), and interjections. In addition, each protocol was scored for the total number of descriptive adjectives, adverbs, and nouns, as well as for the total number of words per description.

The content categories assessed reference to the concrete content of the photograph and inferences about the action in the picture. These categories were based on previously reported content differences (Gleser et al., 1959; Haas, 1979; Moore, 1922; Sause, 1976; Swacker, 1975). Categories included reference to males (e.g., man, boy, farmer), females (e.g., lady, women, mother), adults (e.g., ladies, grown-ups), children (e.g., boy, kids), clothing (e.g., dress, vest), and color (e.g., green bush, black horse), as well as instances of counting (e.g., "there are 1, 2, 3 . . ., 9 windows"), quantification (e.g., two doors, three buildings), and localization of objects (e.g., "in the upper right-hand corner"). Categories assessing subjects' speculations consisted of references to emotions (e.g., happy, afraid), communications (e.g., talking, discussing), personalizations (e.g., "Looks like my uncle's place"), and evaluations (e.g., "I like this picture"). Finally, all protocols were scored for verbalizations unrelated to the picture (e.g., "At recess I played tag").

After scoring 30 training protocols to a criterion of greater than .85 intra-rater and inter-rater reliability for all categories, one author scored each of the 90 verbal samples for form categories, while another scored each for content. All protocols were identified by a code number and were not labeled as to subject age or sex. To assess final reliability, a randomly-selected subset of 15 of the 90 protocols was scored by both raters. Comparisons were made and reliability was calculated by dividing the number of scoring agreements by the number of scoring agreements plus disagreements (Miller, 1980). Reliability was found to be greater than .92 for all scoring categories.

Analysis

Seven form and fourteen content category scores were generated for each subject by dividing the frequency of words within a given category by the total number of words spoken, and multiplying by 100. The total number of words per sample constituted the eighth form variable. All scores were subsequently
analyzed in one of two 2 (sex) $\times$ 3 (age level) Multivariate Analyses of Variance (MANOVAs), one for form categories and one for content categories. In the case of significant multivariate effects, post-hoc univariate Analyses of Variance (ANOVAs) were done to test the independent contribution of each dependent variable (Spector, 1977).

RESULTS

Form differences

Sex. Multivariate Analysis of Variance revealed a significant main effect of sex for form categories, $F_M(8, 77) = 2.03, p < .053$. Subsequent univariate analyses revealed that females employed intensifiers significantly more often than did males, $F(1,84) = 6.34, p < .014$ and used more words per description, $F(1,84) = 4.81, p < .031$.

Age. A multivariate effect of age was found for form categories $F_M(16,154) = 4.877, p < .0001$. ANOVAs identified age differences in the use of female register adjectives, $F(2,84) = 4.49, p < .014$, adverbs, $F(2,84) = 10.46, p < .0001$, and qualifiers, $F(2,84) = 7.56, p < .001$, and revealed age differences in the total number of words per description, $F(2,84) = 19.05, p < .0001$. Post-hoc Tukey tests (cited in Kirk, 1968) indicated that children used significantly more feminine adjectives than did adults ($p < .05$), while adults used more feminine adverbs and qualifiers than did children (each at $p < .01$). Finally, both adolescents and adults exceeded children on total number of words per description (each at $p < .01$).

Content differences

Sex. A multivariate main effect of sex was also found for content categories, $F_M(14,71) = 3.46, p < .0003$. Univariate analysis indicated that males localized objects in the picture more often than did females, $F(1,84) = 6.91, p < .01$, while females spoke more frequently about females, $F(1,84) = 8.20, p < .005$, clothing, $F(1,84) = 11.02, p < .001$, color, $F(1,84) = 10.171, p < .002$, and communication, $F(1,84) = 4.66, p < .034$, than did males.

Age. A multivariate main effect of age on content categories was also found, $F_M(28,142) = 3.675, p < .0001$. Post hoc univariate differences were found for seven categories: reference to males, $F(2,84) = 3.27, p < .04$; color, $F(2,84) = 7.41, p < .001$; localization, $F(2,84) = 5.12, p < .008$; emotion, $F(2,84) = 8.31, p < .0006$; communication, $F(2,84) = 3.32, p < .04$; personalization, $F(2,84) = 3.65, p < .03$; and evalu-
tion, $F(2,84) = 6.14, p < .003$. According to post hoc Tukey tests, children made significantly more references to evaluation ($p < .01$) and to communication ($p < .05$) than did adolescents, while adolescents referred more to localization than did children ($p < .05$). Comparing children to adolescents, children referred more often to males ($p < .05$), color, ($p < .01$), personalization ($p < .05$) and evaluation, ($p < .05$). However, adults mentioned emotions and localized objects in the picture more often than did children ($p < .01$ and $p < .05$ respectively). Finally, adults made more references to emotion than did adolescents ($p < .01$), while adolescents exceeded adults on color references ($p < .01$).

Interactions

No significant multivariate interaction between age and sex was found for either the form categories, $F_M (16,154) = 0.751, p < .739$ or for the content categories, $F_M (28,142) = 1.283, p < .174$.

DISCUSSION

Three issues were addressed in the present study. They were (a) whether, in a relatively status-free situation, women and children employ the female register; (b) whether there is an identifiable pattern of female register use associated with age; and (c) whether there are sex and age differences in verbal content.

The data presented here are fairly straightforward with regard to each question. In the present study female speakers, regardless of age, used more intensive adverbs and more words per description than did males. No other components of the “female” register, however, were found to occur more frequently for female speakers. On the other hand, children did use significantly more of the adjectives thought to comprise a female register than did adults. This pattern of adjective use could be interpreted as reflecting increased status with increased age. Such an interpretation would support the idea of greater female register use by powerless groups. Yet it must be noted that within the feminine adjectives category only “nice” and “pretty” were encountered in any protocol. No speakers used words such as “darling,” “charming,” “lovely,” or “cute.” Thus, an equally plausible explanation for these findings is that language complexity increases with age.

While sex differences were found for language form, the present study failed to uncover a developmental sequence. Specifically, there was no support for Lakoff’s (1975) hypothesis that male children begin
with women's language and gradually shift to more male-appropriate patterns of speech. Although there were significant age differences, these differences were found to be independent of speaker sex.

Several sex and age differences in verbal content were also identified. Females, regardless of age, spoke more frequently about females, clothing, color and communication than did males, while males more frequently localized objects in the painting than did females. In Moore's (1922) report of similar findings, sex differences in verbal content were traced to "ineradicable differences in the original capacities of the two sexes for certain types of enthusiasms" (p. 214). Although the ineradicability and origins of these differences would be justly questioned by modern investigators, such variation in focus may in fact reflect the divergent interests and expertise fostered in the sexes by North American society. Certainly, without controlling for the socially-defined sex roles which mandate sex-typed interests in clothing, color, communication and so forth, it would be inadvisable to attribute such content differences solely to sex. The greater use of localization by males in the present study, however, is particularly interesting when considered in conjunction with males' suggested superior spatial aptitude (Maccoby & Jacklin, 1974; Sherman, 1971), other reports of greater localization by males (Gleser, Gottschalk & Watkins, 1959; Haas, 1979; Sause, 1976) and the possible neurological basis of these aptitudes (McGlone, 1980; Waber, 1977). The consistency of these findings should encourage further investigation into both the environmental and physiological components of the use of localization in language.

In summary, both sex and age differences were found for language form and content. There was, however, little evidence to support the notion of a "female" language used by women, children, or any other age or sex group. Language content, on the other hand, did vary according to sex, primarily in accordance with prevailing sex roles. Further research is indicated, both to specify other potential areas of sex-typing in language, and to investigate the contribution of sex role variables to this process.

REFERENCES


