The intuit is that the need for social interaction increases in the elderly. The issue, however, has not been thoroughly investigated. In the present study we posed the following main questions: (i) does the need for social interaction indeed increase in older age? and (ii) is there a defined personality trait that would interact with the level of social interaction? The study was one of a self-reported group survey. A total of 50 women were enrolled, who were divided into two even contrasting age-groups: young, 20-30 years, and senior, 60-80 years old. The main exclusion criterion was depression, which was screened for before subject enrollment. The results demonstrate that the need for interpersonal meetings was similar in the young and old women; the mean score amounted to 15.4 ±0.5 and 15.6 ±0.6 points, respectively. The most frequent reason for the meetings in both young and old women was to socialize; 80 and 68% of women, respectively. The rarest, in turn, reason was to get help in everyday life matters; 8% young and 12% old women. Thus, we failed to show appreciable differences in the need, character, and goals of social interaction between the two age-groups of women. Social interaction had most often a free and selfless character. We also found that extraversion, independent of age, facilitated social interaction. In conclusion, although to the question asked of whether 'the older the person, the more he/she misses the interaction with others' 76-88% of the surveyed women in both age-groups answered affirmatively, the findings of the present study failed to confirm that.

Key words: aging, personality, social interaction

INTRODUCTION

The number of old people increases worldwide. Attention, therefore, should be directed to the social consequences of increased longevity. The stereotype of the aged is often identified with the vision of failure or repulse. Old people are met with
the sense of being unwanted, unneeded, or falling behind in every day chorus (1). The inescapable senility is looked upon with anxiety and fear. Senility is said to be bound to ailments, physical handicap, and the need for being taken care of by others. The most serious problems of the aged include loneliness, diseases or, life in poverty, or the feeling of uselessness. All these factors gradually lead to the elimination of old people from active life, and therefore their marginalization, after the retirement age.

From the aging person's point of view, decline in vital functions leads to realization that he may require the help of other, strange people (2). That causes, on the one hand, psychological problems related to the loss of self-independence of past adult life and, on the other, changes the older person's perspective on the need for, and facilitation of, interaction with other people. Loneliness and missing out on situations that help find new acquaintances (3) seem a major psychological issue in the aged. The intuit, therefore, is that the need for social interaction would rise in old age. In the present study we set out to substantiate this intuitional belief by comparing the level of social interaction and its character in two contrasting, young and old, age-groups of women. We posed the following questions: (i) does the need for social interaction really increase in senior age, (ii) how would the goals of social interaction change with age, (iii) would social interaction in older persons be tied to specific expectations in return, and (iv) is there a defined personality trait that would interact with the level of social interaction?

MATERIAL AND METHODS

Subjects

The study was approved by the Review Board of the Institute of Psychology of Opole University in Poland. Informed consent was obtained from all participants.

A total of 50 women, randomly collected, were enrolled into the study, who were divided into two even contrasting age-groups: young, 20-30 years old university students of humanistic faculties, and senior, 60-80 years old members of a third age university. The subjects of both groups were in good health and were both physically and mentally active. The main exclusion criteria, concerning both groups, were depression, treatment with medications that could influence the psychosomatic state, or acute conditions of illness. The presence and intensity of depression, which is known to profoundly affect social interaction (4-6), was screened for with the use of the Physical Heath Questionnaire (PHQ)-9 by Kroenke, Spitzer, and Williams (7), a measure based on Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV criteria for depression. Persons exhibiting symptoms of depression were excluded from further procedures.

Psychometric tools

The study was one of a self-reported group survey. Subjects of both age-groups were tested by means of the same psychometric tools. All participants of the study were subjected to the same psychometric tests. Psychological personality trait was tested with a NEO Fife Factor Inventory (NEO-FFI) developed by Costa and McCrea, in the Polish adaptation by Strelau and Zawadzki (8). The questionnaire consists of a 60 item assessment of domains such as Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C). The
questionnaire has been extensively verified for persons above the age of 15 years of either sex. It is designed to take about 15 min to administer. The 60 items are rated on a four point scale, with some of the items in each domain reverse-keyed. The raw score ranges from 0 to 48 points, and the higher the score the greater intensity of a given trait.

The level of social interaction was assessed with a questionnaire of our own design, specifically developed for the study. The questionnaire consists of 7 items. The first four items concern the frequency of actual, or desired, social interactions and meetings in two weeks preceding the time of survey. The following three aimed to assess the goal of social interaction desired and the person’s expectations from the interaction.

Data analysis

Data were expressed as means ±SE of raw scores. The independent variable was the age of studied women and the dependent ones were the level, type, and goals of social interaction. Statistical differences between the corresponding values of the two age-groups were tested with a two-tailed unpaired \( t \)-test. Whether the distribution of the women by specific goals of social interactions and the benefits expected from them differed between the two age-groups was tested with chi-square. Linear regression was used to estimate the influence of extraversion on the level of social interaction. Significance was accepted at \( P \leq 0.05 \).

RESULTS

The results demonstrate that the overall mean frequency of social interactions, or get-together, amounted 15.4 ±0.5 and 15.6 ±0.6 points in the young and elderly women, respectively, which was not statistically different. Concerning the goal of the get-togethers, the decisive majority - 80% of the young and 68% of the elderly women reported social mixing and interaction. Other goals, such as the need to reveal thoughts or feelings, or help in everyday chorus, were given by about 8-20% of respondents, with no appreciable differences between both age-groups (Table 1).

Concerning the benefits expected from the social interactions, the majority of women from both age-groups responded that they do not expect any benefits or compensation in return and, therefore, the interactions are mostly gratuitous - 52

<table>
<thead>
<tr>
<th>Goal of get-togethers</th>
<th>YOUNG</th>
<th>%</th>
<th>ELDERLY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>20</td>
<td>80</td>
<td>17</td>
<td>68</td>
</tr>
<tr>
<td>Unbosom</td>
<td>3</td>
<td>12</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Help in chores</td>
<td>2</td>
<td>8</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefit expected</th>
<th>YOUNG</th>
<th>%</th>
<th>ELDERLY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Closeness</td>
<td>4</td>
<td>16</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Psycho support</td>
<td>8</td>
<td>32</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Gratuitous</td>
<td>13</td>
<td>52</td>
<td>17</td>
<td>68</td>
</tr>
</tbody>
</table>

No significant differences were noted between the two age-groups.
and 68% of young and old women, respectively. The need for psychological, or social, support was reported by 32 and 16% of young and old women, respectively. This figure, although twice as great in younger respondents, did not reach statistical significance. The want of closeness was reported by 16% in both age-groups. None of the women in either age-group pointed to the economic benefits as the aim of social interactions. No statistical differences were noted in the above-mentioned factors between the two age-groups (Table 1).

The comparison of extraversion and neuroticism domains of personality inventory showed no appreciable differences between the two age groups. However, within either age-group, the subjects scored significantly more on the extraversion than neuroticism subscales (Table 2). There were no inter-group differences in the other domains of NEO-FFI personality inventory (data not shown).

We further found that extraversion may, to an extent, factor in facilitating social interaction. The linear regression coefficients describing the increase in social interaction on the point score of extraversion, show a positive relationship between the two, which, albeit weak, was significant (P<0.05) (Fig. 1). This relationship was similar in both age-groups, and was, therefore,

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**Table 2.** Extraversion and neuroticism in young and elderly women.

<table>
<thead>
<tr>
<th></th>
<th>YOUNG</th>
<th>ELDERLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>30.3 ±1.2*</td>
<td>28.9 ±1.4*</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>23.8 ±1.4</td>
<td>23.8 ±1.8</td>
</tr>
</tbody>
</table>

Values are means ±SE of raw data. *P<0.05 for the difference between the two domains within either group. No significant differences were noted between the two age-groups.

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**Fig. 1.** Relationship between the level of social interaction and extraversion in the young and elderly groups of women studied. Lines are linear regression lines. There was a weak, albeit significant at P<0.05, positive influence of extraversion on social interaction in both age-groups.
independent of age. In contrast, neuroticism failed to have an impact on the need for social interaction.

**DISCUSSION**

The main purpose of this study was an attempt to determine whether the need for social interaction, understood as getting together and desiring social contacts with other persons, could increase with increasing age. That seems to be an intuitional psychological belief that, however, has not yet been thoroughly verified. We addressed this issue by comparing the level of social interaction in two contrasting, but both physically and mentally active, age groups of women: young and elderly. The choice of the woman population samples for the study was prompted by the studies such as that by Moremen (9) indicating that women, particularly older, may be more empathic toward the social contacts and by our feeling, supported by multiple interviews with both genders, that they also were more interested and engaged in the study goals than men were.

The findings of the study are grossly negative. We failed to substantiate any major differences in the need for social interaction between the two age-groups. Therefore, social interaction seems immune to, and independent of, aging. Interestingly, however, the majorities of both young and old women indicated typically social and devoid of return benefits goals of social contacts. On the other side, the rarest goal of social interaction was the desire to obtain help in everyday life matters or in economics.

An analysis of the potential influence of personality on the feeling for social interaction shows the same trend in both age-groups, which is that women characterized by a higher level of extraversion are more apt to engage in social interaction. The reason for that may lie in a higher level of physical and intellectual activities as well as the ability to feel better positive emotions in social situation by extraverts; the phenomenon that has been described in the literature (10).

It is worthwhile to note that to the question asked of whether the older the person the stronger the feeling for social interaction with other people, 76-78% of the women of both age-groups answered affirmatively. However, the findings of the study failed to support this intuitional notion at the statistical level. The discrepancy between the feeling sensed and the results obtained is not readily explainable. It is plausible that the population samples used in the present study are not representative for the general population. In particular, the group of young university students could have been exposed to a greater level of stressful situations in the course of the study term, which might skew the survey results toward the higher level of social contacts reported. The possible, distorting influence of stress on the results obtained may also be inferred from a nearly twice as great need for psychological support in the young, compared with the elderly women, and from the greater prevalence of depression in the young than
old age-group (data not shown). Stress is a known determinant of depression (11). More frequent incidence of depression in the young also is reported elsewhere (12). The level of stress was not control for in the present study.

In conclusion, the need for social interaction remains fairly stable, independent of age in women. The major aim of interaction with other persons is to socialize, as it has most often a free and selfless character, and is not linked to return benefits. Extraverts are more prone to social contacts, irrespective of age.

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**REFERENCES**


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