RESEARCH CONCERNS
Aging as Perceived by Saudi Elders

The field of gerontology has been gaining importance in recent years. More and more people are living longer because of advances in medical technology and improved health care delivery systems. People in the health field are studying the theories of aging to better understand elderly people; these theories are being taught in universities throughout the world.

A review of the literature shows that theories of aging can be grouped as biological (e.g., wear and tear theory, lipofuscin accumulation theory, cross linkage theory), psychological (e.g., Sullivan's interpersonal theory, Erickson's developmental stages), and sociological (e.g., disengagement theory, activity theory, continuity theory) theories of aging (Burbank, 1986; Forbes, 1981; Vander Zyl, 1979).

These theories, however, are based on Western culture, which may be appropriate for the Western world, but not necessarily so for other cultures. Psychosocial theories are particularly apt to change with cultural differences. It has long been observed, for example, that people in India and China treat elders differently than do North Americans or Europeans.

Saudi Arabia is a rapidly developing Moslem Arabian country in the Middle East. Its belief system is interconnected with the Islamic religion and Arabian culture. It would be expected that with these differences and the ideologic gap between the younger and older generation, the aging process would be experienced differently than in the West. However, no studies could be found in the literature that investigated the psychosocial changes that accompany aging from an Arabian perspective.

The continuity theory, also known as the developmental theory of aging, is used as the theoretical framework for this study. Neugarten and associates (1968), in developing the theory, studied longitudinally the personality of 700 relatively healthy older adults between 40 and 70. Precepts of the theory that were used for the study are as follows:

- As people age, their personality make-up does not change and

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their behaviors become more predictable;
- As people age, they develop a new system of relationships that can give them support when needed;
- Among the personality processes that change with aging are a decrease in ego energy, ego style, and sex role perception;
- Older adults are concerned with their individuality and introspection; they are more concerned with their own life and its meaning and tend to see the environment as more dangerous and difficult to control;
- Older adults are no longer controlled by peer pressure and fads; and
- There is a change in sex role attitudes; men's and women's traditional roles tend to switch—women become more aggressive and authoritative, and men become more nurturant and emotional (Esberger, 1989).

It is hoped that a study that investigates the relevance of continuity theory to Saudi patients would add to our understanding of the elderly population. The nurse, by the nature of his or her work, must understand the theories of aging. Nursing research can contribute much to expand, modify, or verify existing scientific inquiry. Nurses are then better able to plan and execute suggested nursing interventions for individual clients. The objective of the study, therefore, was to test the continuity theory of aging in a non-Western culture—that is, Saudi Arabian culture.

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examine the effect of selected demographic variables on these perceptions.

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**METHODOLOGY**

Data were collected at the Al Shemaisi (Ministry of Health Public Hospital) outpatient clinics. The convenience sample consisted of 129 Saudi medical (87%) and surgical (13%) patients over 40. Eighty-four percent of the respondents were men; 16% were women. Thirty-three percent of the respondents were between 40 and 50, 42% were between 51 and 60, and 25% were over 60.

Twenty-nine percent of the respondents stated their occupation as professional, 23% as not working, and 21% as manual workers. Forty-seven percent of the respondents did not read or write, 29% had completed primary school, and 19% had secondary education or higher.

The demographic characteristics of this study sample differ from the Neugarten and associates' (1968) series of studies. Subjects in this sample were relatively younger, which is probably because life expectancy in Saudi Arabia, as in most countries in the region, is much lower than that in Western countries. The study sample also was less educated and had more men than women. This sample consisted of patients coming to an outpatient clinic either for a checkup or follow-up; in the Neugarten and associates studies the subjects were selected from the general population.

It is possible that illness and contact with the health care system may change a person's view of aging. The size of the sample was relatively smaller than what the investigators desired because of time constraints (the principal investigator's contract with the university in Saudi Arabia came to an end before the data collection was completed).

An interview guide consisting of 19 statements was developed for the study from behavioral changes that are encompassed in the continuity theory of aging. Respondents were asked to respond yes or no to each question. The face validity of the instrument was established by asking five experts to respond to the instrument in its English and Arabic versions in terms of relevance of the question to the theory, thoroughness, measurability and accurateness of the Arabic translation.

A pilot test was conducted on 10 male and 8 female patients in the same setting prior to data collection to test for clarity of the wording and feasibility of conducting the study. The pilot subjects were not included in the final sample.

Data were collected by interview method. Two nurses working in the outpatient department were selected and trained by the principal investigator to conduct the interviews. They read the questions to the subjects and marked the response.

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**RESULTS AND ANALYSIS**

Data were analyzed with descriptive frequencies and cross tabulations...
of responses with demographic variables (age, gender, medical/surgical service, educational level, occupation).

Correspondence of Subject Perceptions and Theory Precepts

In order to test the correspondence of these Saudi subjects' perceptions to the precepts of the continuity theory, $\chi^2$ goodness of fit procedures were used on each question. It was hypothesized that if the continuity theory is universal, then a sample of Saudis should agree with these precepts. Ideally, the questionnaire responses would be compared among Western and Saudi respondents.

As no previous Western study had approached the question in a similar manner, the $\chi^2$ goodness of fit test was used for the null hypothesis that Saudis would respond equally yes and no to the questions (probabilities of .50, .50). Thus, accepting the null would mean that the opinions correspond to no theory. If the null is rejected and the majority of the respondents agreed with the precept, then the Neugarten and associates theory is supported. If the null is rejected and the majority of respondents disagree with the precept, then a contradictory theory is supported. These results are presented in Table 1.

In only one of the 19 precepts tested did the Saudi subjects differ significantly from the Western viewpoint. The Saudis reported a change in their personality as they grew older, which is contrary to the Western viewpoint (Neugarten, 1968). In five of the other precepts tested, the Saudis agreed with the Western precepts. Male subjects reported becoming more nurturant in the family than they did when younger. Both gender categories agreed that they were becoming more contemplative, introspective, and accepting of their lives as they grew older. For the other 13 questions the null was not rejected, indicating that there is no theory. It is concluded, then, that the continuity theory is not supported by these data.

This is an interesting result. For years, for example, teachers in Saudi Arabia taught the continuity theory (as well as others) in their classrooms without testing the validity of Western theories to the Saudi culture. Much damage can be done if psychological theories that are developed elsewhere are imposed on any culture without prior scrutiny (Leininger, 1980).

It is imperative that care be taken in the future not to blindly transfer theories from other cultures. Furthermore, there is a need for future studies that would examine this area in greater depth to develop theories of aging that are Saudi.

### TABLE 1
**Agreement/Disagreement With Western Precepts of Continuity Theory Among Saudis**

<table>
<thead>
<tr>
<th>Precept</th>
<th>Agree</th>
<th>Disagree</th>
<th>$\chi^2$*</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change of personality makeup</td>
<td>97</td>
<td>28</td>
<td>38.08</td>
<td>.001</td>
</tr>
<tr>
<td>Behavior is more predictable</td>
<td>90</td>
<td>37</td>
<td>22.12</td>
<td>.001</td>
</tr>
<tr>
<td>New relationships</td>
<td>73</td>
<td>54</td>
<td>2.84</td>
<td>.09</td>
</tr>
<tr>
<td>Change in sex roles (men)</td>
<td>56</td>
<td>53</td>
<td>.08</td>
<td>.77</td>
</tr>
<tr>
<td>More feminine in feelings (men)</td>
<td>101</td>
<td>8</td>
<td>49.35</td>
<td>.001</td>
</tr>
<tr>
<td>Change in sex roles (women)</td>
<td>11</td>
<td>9</td>
<td>.20</td>
<td>.65</td>
</tr>
<tr>
<td>More masculine in feelings</td>
<td>10</td>
<td>10</td>
<td>0.00</td>
<td>.99</td>
</tr>
<tr>
<td>Less affected by passing fads</td>
<td>55</td>
<td>74</td>
<td>2.80</td>
<td>.09</td>
</tr>
<tr>
<td>Less affected by social pressure</td>
<td>70</td>
<td>59</td>
<td>.93</td>
<td>.3</td>
</tr>
<tr>
<td>Less interested in competition</td>
<td>73</td>
<td>55</td>
<td>2.53</td>
<td>.1</td>
</tr>
<tr>
<td>More contemplative of past life</td>
<td>104</td>
<td>25</td>
<td>48.38</td>
<td>.001</td>
</tr>
<tr>
<td>More introspective</td>
<td>103</td>
<td>26</td>
<td>45.96</td>
<td>.001</td>
</tr>
<tr>
<td>More adequate acceptance of life</td>
<td>86</td>
<td>43</td>
<td>14.33</td>
<td>.001</td>
</tr>
<tr>
<td>Less concerned with passing affairs</td>
<td>72</td>
<td>56</td>
<td>.2</td>
<td>.1</td>
</tr>
<tr>
<td>Environment more complex</td>
<td>67</td>
<td>62</td>
<td>19</td>
<td>.66</td>
</tr>
<tr>
<td>Gradual decrease in social activities</td>
<td>72</td>
<td>57</td>
<td>1.7</td>
<td>.18</td>
</tr>
<tr>
<td>Withdrawal from society</td>
<td>63</td>
<td>66</td>
<td>.07</td>
<td>.79</td>
</tr>
<tr>
<td>Decrease in ego energy</td>
<td>65</td>
<td>64</td>
<td>.008</td>
<td>.93</td>
</tr>
<tr>
<td>Decrease in ego style</td>
<td>75</td>
<td>53</td>
<td>3.78</td>
<td>.05</td>
</tr>
</tbody>
</table>

* $\chi^2$ goodness of fit (expected probabilities .50, .50)
Other researchers also have questioned the validity of the continuity theory, even as applied to Western culture. Fox (1982), for example, concluded that no explicit formalization of the theory has been attempted and the term has been used to convey a variety of meanings. She questioned whether older people are preprogrammed by their younger personality development, or are also initiators of change and growth. She argued that the validity of the theory depends on how one defines continuity: if narrowly, then any change is evidence of discontinuity; if broad, then problems of relatedness may exist.

Burbank (1986) also questioned the testability of the theory and concluded her analysis by indicating that nurses should be careful not to borrow any one of the three theories (continuity, disengagement, or activity) as a basis for nursing practice. She emphasized that the application of continuity theory may foster a more careful assessment of what the individual was previously, and that this may assume a static personality that does not change over time. She suggested that what is important for successful aging is the meaning of life to the individual.

**Factors With an Effect on Perceptions**

The second purpose of the study was to find out, within the Saudi culture, what factors have an effect on the perceptions of aging. Five demographic variables (medical/surgical service, gender, age, occupation, and educational level) were studied in relation to the dependent variable (perceptions of aging). Cross tabula-
tion between each demographic variable and each precept was done and $\chi^2$ values were calculated (Table 2). No studies could be found in the literature that investigated this area.

In relation to service, there were three significant differences between medical and surgical patients. Medical patients were more introspective than surgical patients and were more likely to agree that they had decreased ego energy and ego style. These findings are not surprising considering that the medical patients were more likely to be chronically ill than the surgical patients. Chronic illness tends to foster feelings of introspection and feelings of vulnerability (Miller, 1983; Ruffing-Rahal, 1985).

Men were more introspective than women and were more likely to agree that their ego energy and style were decreasing with aging than were women. This is probably because the women in Riyadh, Saudi Arabia, lead different lives from the men. They are more involved with their children, going to parties and visiting; therefore, they have less time for introspection.

There were four significant relations with age. Older subjects (over 61) agreed that they were becoming less competitive, less affected by fads, more introspective, and more apt to withdraw from society. This finding implies that some aspects of the continuity theory may hold true for elders. The younger subjects, however, seem preoccupied with work and “moving up the ladder.”

It is important to note here that in the current study, age as a factor was not studied in depth in relation to the precepts. Care should be taken not to make strong generalizations from these data. Future cross sectional studies could investigate this area in more depth using a larger sample and a broader age range.

Several significant relations between occupation and some of the theoretical precepts were found. Individuals who were not working agreed that they were less affected by passing fads as they got older. This difference could be a function of age because subjects who did not work also were older.

Female homemakers were less likely than those in other occupations to agree that they were getting more introspective as they got older (a gender difference). The groups classified as professional or not working were more likely to agree that they were becoming less concerned with passing affairs as they aged than those in other occupational groups. The professional group was less likely than the other occupational groups to see the environment as becoming more complex and difficult to control as it aged, to withdraw from society, and to agree that its ego style decreased with age.

The lower educational group (those classified as being unable to read or write) disagreed that they were becoming more reflective of past accomplishments as they aged, whereas the more highly educated groups did not. Individuals with higher education were less likely to agree that they were withdrawing from society, and less likely to agree that their ego style was decreasing than the other educational groups.

As might be expected, age, occupation, and education were moderately correlated (age, occupation $r = .53$; age, education $r = .41$; occupation, education $r = .70$). Older people were likely to be not working and to be unable to read and write. Professional occupation was correlated with higher education.

These data, then, do not support the entirety of the continuity theory. Thirteen of the 19 precepts questioned appeared to be not relevant to the Saudi subjects’ ideas of aging. On one precept there was significant disagreement; Saudi subjects saw their personalities as changing as they aged, whereas the continuity theory posits no change in basic personality. Saudi subjects in this study appeared to perceive aging differently than subjects of Neugarten and associates’ series of studies, and do not support any particular Western theory. Therefore, perceptions of aging may be culturally based.

Furthermore, within a particular culture there are differences according to selected demographic variables, such as age, gender, or life situation (medical versus surgical service). Other life situations may influence perceptions of aging as well. There are several factors that influence aging; it is important that the interplay among these factors be the focus of future studies.

It is important to note, however, that Neugarten and associates acknowledged in some of their writings that there are individual differences (Neugarten, 1972). Our study showed that the differences are greater than the commonalities. The implication is that nurses should sup-
1. Theories of aging popularly taught to nurses are based on Western culture, which may not be appropriate for other cultures.

2. The continuity theory of aging was not supported with Saudi patients in a test of hypotheses derived from the theory.

3. Nurses must be aware that Western theories may not be valid in other cultures. Nurses, therefore, must be cautious regarding generalizations concerning aging—individuals, regardless of age, must be treated as unique.

**RECOMMENDATIONS**

The findings of this study support the following recommendations:

- Psychological and social theories of aging must be studied carefully for cultural differences before imposing them on another culture (much harm can be prevented by prior inspection);
- Elderly people must be assessed individually, taking into consideration that each individual person, whether young or old, is unique;
- Further studies of this type must be undertaken in Saudi Arabia and other countries, with larger samples; and
- Studies must analyze aging in depth from a cultural perspective. It is imperative that health professionals study the aging process so that they will be better able to help elders maximize their potential and age with dignity and happiness.

**REFERENCES**


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