# Comparison of aging perception among the elderly population of Vadodara and Ahmedabad City, Gujarat, India

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## Abstract

*Aging is considered as accretion of changes among the living organisms over a period of time. Aging in humans refers to a multidimensional process of physical, psychological, and social change. Some dimensions of aging grow and expand over time, while others decline, therefore aging perception becomes more important. Hence, the study was conducted to find out the aging perception among elderly population of Vadodara and Ahmedabad city. The data were gathered through a questionnaire from a sample of 200 elderly (100 from Vadodara city and 100 from Ahmedabad city) through convenience sampling technique. The analysis of data revealed that the respondents of Vadodara city had positive perception regarding aging while negative perception regarding aging were found among the respondents of Ahmedabad city.*

**Keywords:** Perception, Aging, Elderly.

## Introduction

Aging is looked upon as a process rather than the state of "oldness" in the present fitness. It may best be defined as, "the survival of the growing number of people who have competed their traditional adult role of making a living and child rearing[1]. Aging is a decline in physiological competence that inevitably increases and along with other forms of environmental stress creates numbers of physical, economical, social and physiological problems. Oldness comes with the age of an individual when a person reaches 60 or 62 years of age[2].

According to Ministry of Social Justice and Empowerment, Government of India (2011), in India, a 'senior citizen' or 'older adult' is defined as a person aged 60 years and older. This is the fastest growing population in India, increasing from 6.7% in 1991 to 10% in 2021[3]. Between 2001 and 2051, the number of old- old (age 70 years and older) is projected to increase 5-fold, that of the oldest- old (age 80 years and older) is expected to increase 4-fold; these increases are faster than for any other age groups[4]. Today, India is home to one out of every 10 senior citizens of the world. The nationwide dependency ratio of elderly to general population is 13.1%[4].

Aging is a progressive decline in function and performance which accompanies advancing years[5]. The aging population has to cope with the associated progressive loss of physiological capabilities which may dramatically reduce the individual's ability to participate in everyday activities[6]. Aging can be represented as a progressive inability to cope with environmental demands and is reflected in an increased probability of death, as individuals grow older[7]. As persons age,

the way one interacts with environments changes, and the ability to meet the demands that environments place on the individual usually decreases[8].

The elderly people not only face physical problems as they are aged, but they also experience emotional challenges as well. Psychological aging is studied in terms of changes in the nervous system and it consists of general decline in the mental abilities that accompany old age. It also includes the attitude and behaviour of others towards them[9]. Psychological problems faced by elderly are adaptable caution, depressed mood, loneliness, isolated, unsafe, confused, abused, fear, delirium, anxiety, dementia, mental disorders (memory weak, personality disorder, thinking ability decreased, etc.), reduced mental and cognitive ability, etc.[10,11]. They may also face psychological problems due to loss of a spouse, siblings and close friends[10,12]. According to Sing, et al., the psychological problems had dependency on the type of family, interpersonal relations, education status, marital status, income and gender in home living elderly. While marked individual differences exist in the ages at which physical and mental decline set in, sixty years is taken as the arbitrary deciding line between late maturity and old age[13].

Self-perceptions categorised as positive or negative have been found to have a differential impact on functional health at 18 year follow up[14] and more importantly, on rates of mortality at 23-year follow up[15]. Research has also shown that beliefs about aging predict cause-specific mortality, i.e. individuals with positive self-perceptions of aging were less likely to die of respiratory causes than individuals with negative self-perceptions of aging[16]. Relationships between self-perceptions

of aging and psychological health outcomes such as life-satisfaction[17], quality of life[18], loneliness[19] and depression[20], have also been documented. Furthermore, at a behavioural level, perceptions of aging are related to the adoption of health-promoting behaviours[21], and coping strategies[22]. Such findings are particularly important given that negative perceptions and beliefs about aging might be amenable to change[23] and as such could be considered in interventions to facilitate physical and psychological health in later life. Therefore, an attempt was made to find out the aging perception among elderly of Vadodara and Ahmedabad City.

**Objectives of the study:** i. To find out the perception of elderly population of Vadodara and Ahmedabad city regarding aging. ii. To compare the aging perception of elderly population of Vadodara and Ahmedabad city.

## Methodology

The present investigation was a descriptive research conducted on elderly population through convenience sampling from Vadodara and Ahmedabad city. The sample comprised of 100 senior citizens each from Vadodara city and 100 from Ahmedabad city thereby totaling 200 senior citizens. The tool for data collection was questionnaire which comprised of three sections. Section one contained questions regarding the background information of the respondents. Section two contained statements reflecting aging perception. This scale was Likert type summated rating scale. It had 5 point continuum for the responses 'Strongly agree', 'Agree', 'Neutral', 'Disagree' and 'Strongly disagree' which were scored 5 through 1 respectively for the positive statements and for the negative statements the scoring was reversed. The possible minimum and maximum scores were divided into 3 categories having equal intervals for the scale which determined the extent of aging

perception of elderly. The scale was subjected to establishment of content validity. The reliability coefficient derived for all the scale 0.746.

## Results and discussion

**Major findings:** The findings of the study obtained through the analysis of the data supported discussion and interpretations are presented here.

**Section-I: Background information of the respondents:** This section deals with the personal and family information of the respondent.

**Age and Gender of the respondents:** It was revealed that the mean age of the respondents of Vadodara city was 70.66 years while the mean age of respondents of Ahmedabad city was 73.52 years. Majority of the respondents of Vadodara city were between the age group of 60-68 years whereas in Ahmedabad were between 78-86 years (Figure-1). Majority of the respondents of Vadodara city were females while majority of respondents were from Ahmedabad city.

**Living status, previous and present employment status of respondents:** It was observed that one half of the respondents of both the cities (Vadodara and Ahmedabad) were living with their spouse. More than one half of the respondents of both the cities (Vadodara and Ahmedabad) are not employed at present. Less than one half of the respondents of Vadodara city and less than one fourth of the respondents from Ahmedabad city were not employed previously (Figure-2). Less than one third of the respondents of Vadodara city were employed before retirement and a little less than one half of the respondents of Ahmedabad city were employed before retirement.
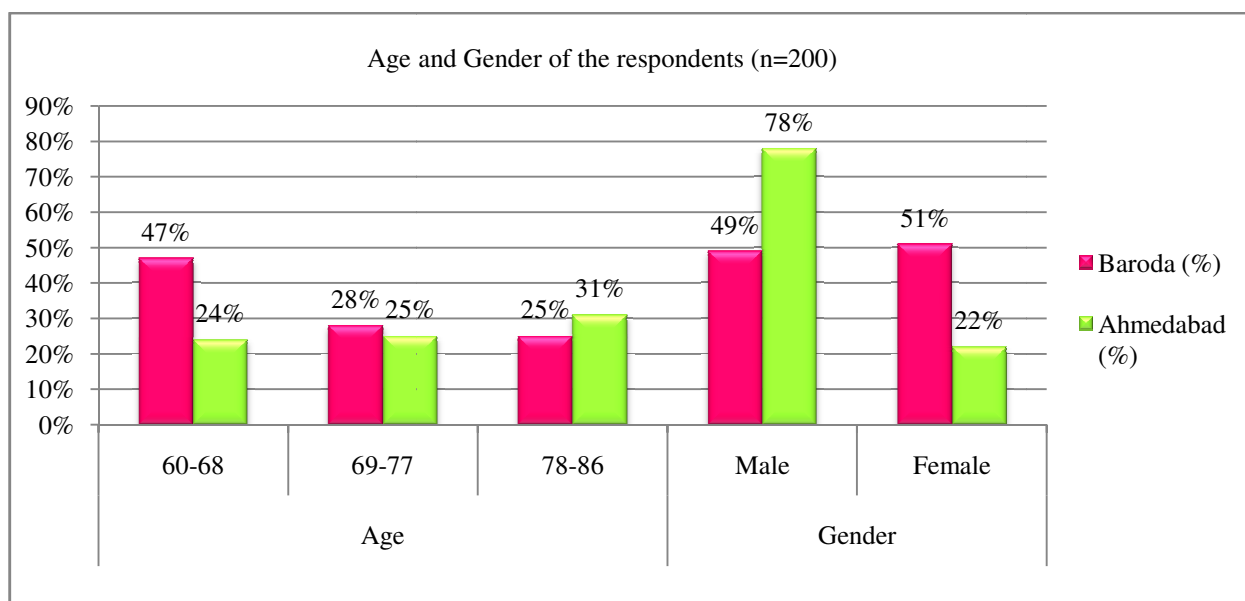


**Figure-1:** Distribution of respondents according to their age and gender.

**Total Monthly Income before and after retirement of the respondents of Vadodara city:** The mean monthly income of the respondents of Vadodara city before their retirement period was Rs. 20209.09 while of respondents of Ahmedabad city was Rs. 40467.95 (Figure-3). Majority of the respondents of both the cities had their monthly income between Rs. 15000 - Rs. 29500.

The mean monthly income of the respondents of Vadodara city after retirement was Rs. 18429.79 and Rs. 44954.55 of the respondents of Ahmedabad city. Majority of the respondents of both the cities had monthly income ranged between Rs. 10000-Rs. 35000.
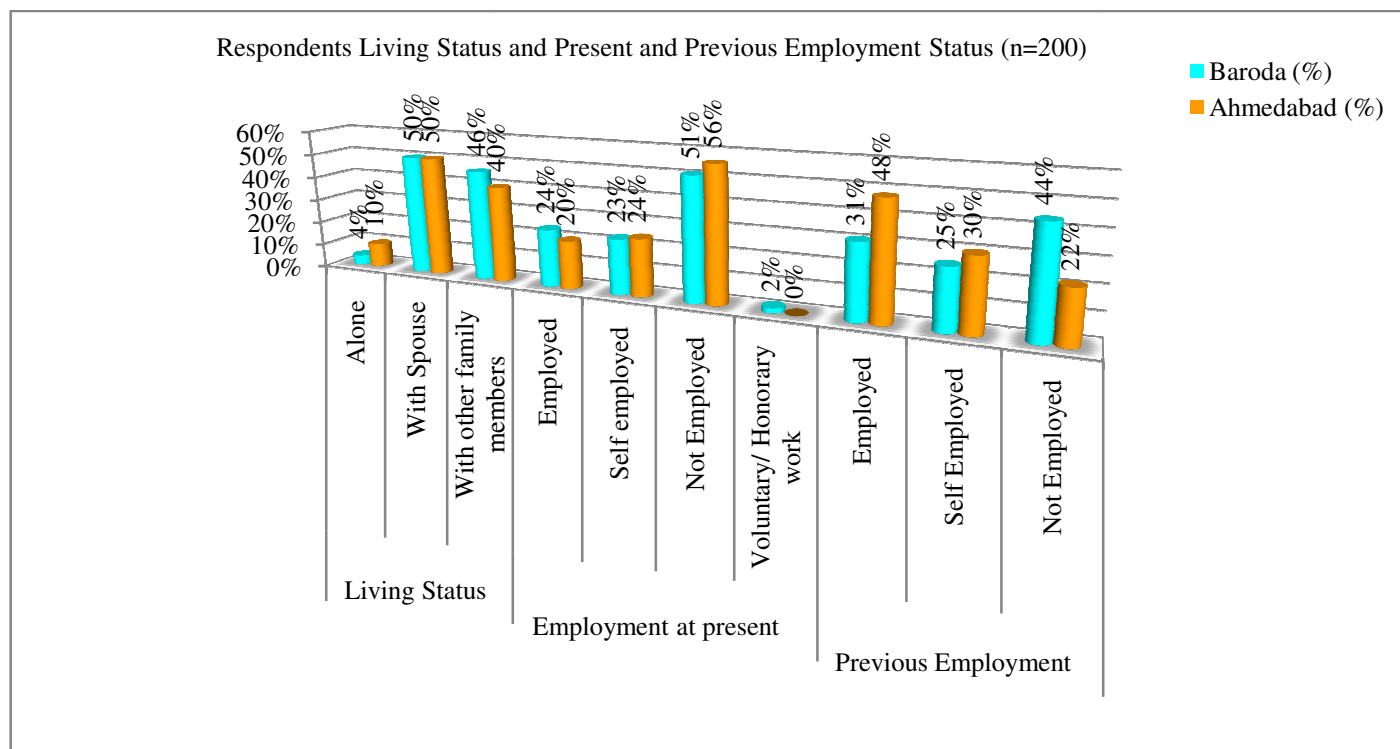


**Figure-2:** Distribution of respondents according to their living status, present and previous employment.
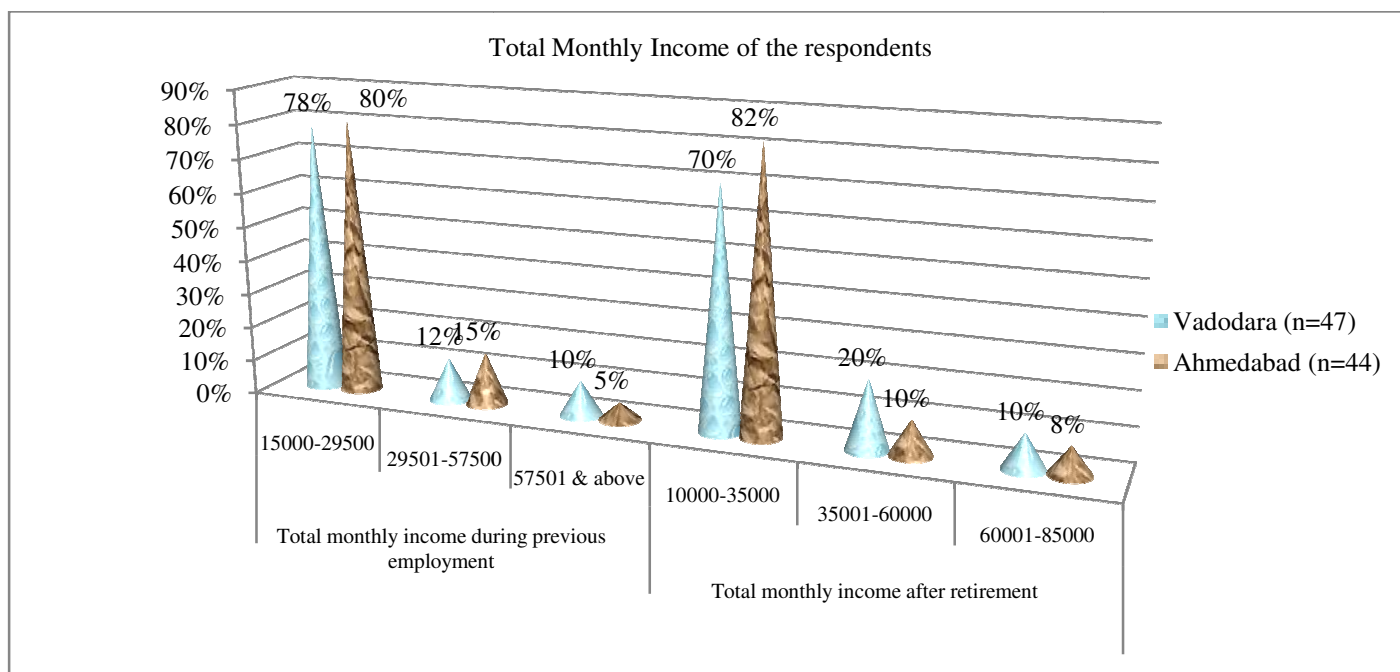


**Figure-3:** Distribution of the respondents according to their total monthly income.

**Section II: Self-perception of respondents regarding aging:** The data revealed that the respondents of Ahmedabad city perceived more negatively about aging than of respondents of Vadodara city. More than three fourth of the respondents of Ahmedabad city had negative perception regarding aging while Majority of the respondents of Vadodara city had positive perception regarding aging (Figure-4).

**Testing of hypothesis:** A number of hypotheses were formulated on the basis of objectives of the study. For the

purpose of statistical analysis, the hypotheses were formulated in the null form. The results are presented here.

**Ho$_1$: There is no variation in the perception of the respondents of Vadodara city regarding aging and their personal information:** To find out the variation in the perception of respondents of Vadodara city regarding aging and their personal information 'f'-ratio was computed.
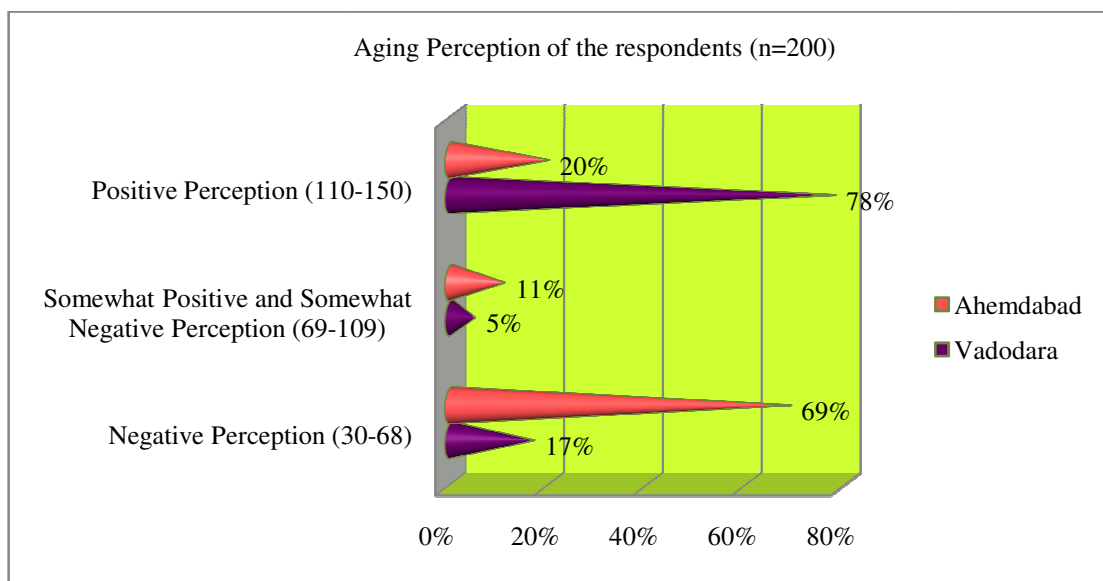


**Figure-4:** Distribution of respondents according to perception regarding aging.

**Table-1:** Analysis of Variance showing variation in the perception of the respondents of Vadodara City regarding aging and their personal information.

| Variables | Sources of variation | df | Sum of squares | Mean Squares | f-ratio | Level of significance |
|---|---|---|---|---|---|---|
| Age | Between groups | 2 | 3.676 | 1.838 | 9.734 | 0.05 |
| | Within groups | 198 | 37.19 | 0.189 | | |
| Living Status | Between groups | 2 | 0.258 | 0.129 | 0.625 | N.S.* |
| | Within groups | 198 | 40.617 | 0.206 | | |
| Employment at present | Between groups | 3 | 0.862 | 0.287 | 1.407 | N.S.* |
| | Within groups | 197 | 40.013 | 0.204 | | |
| Retirement period | Between groups | 2 | 2.112 | 1.056 | 8.261 | 0.05 |
| | Within groups | 66 | 8.438 | 0.128 | | |
| Total Monthly Income after retirement | Between groups | 2 | 0.772 | 0.386 | 1.827 | N.S.* |
| | Within groups | 70 | 14.790 | 0.211 | | |

*N.S.= Not Significant.

The computed 'f'- ratio for the perception of the respondents of Vadodara city regarding aging and their personal selected variables was found to be significant at 0.05 level of significance (Table-1) with their age and retirement period. Hence the null hypothesis was partially rejected. On the other hand the computed 'f'-ratio for the perception of the respondents regarding aging with present employment and total monthly family income after retirement. Therefore, the null hypothesis was partially accepted.

**Ho$_2$: There is no variation in the perception of the respondents of Ahmedabad city regarding aging and their personal information.**

The computed 'f'- ratio for the perception of the respondents of Ahmedabad city regarding aging and their personal selected variables was found to be significant with their present employment at 0.05 level of significance (Table-2). Hence the null hypothesis was partially rejected. While the computed 'f'-ratio for the perception of the respondents regarding aging and their personal selected variables viz. age, living status, retirement period and total monthly income after retirement were found to be insignificant. Therefore, the null hypothesis was partially accepted.

**Ho$_3$: The perception of respondents regarding aging will not differ with their gender.**

To find out the difference in the perception of respondents regarding aging with their gender 't'-test was computed.

**Table-2:** Analysis of Variance showing variation in the perception of the respondents of Ahmedabad city regarding aging and their personal information.

| Variables | Sources of variation | df | Sum of squares | Mean Squares | f-ratio | Level of significance |
|---|---|---|---|---|---|---|
| Age | Between groups | 2 | 0.254 | 0.127 | 1.838 | N.S.* |
| | Within groups | 198 | 13.621 | 0.069 | | |
| Living Status | Between groups | 2 | 0.223 | 0.111 | 1.608 | N.S.* |
| | Within groups | 198 | 13.652 | 0.069 | | |
| Employment at present | Between groups | 3 | 0.524 | 0.175 | 2.563 | 0.05 |
| | Within groups | 197 | 13.351 | 0.068 | | |
| Retirement period | Between groups | 2 | 0.037 | 0.018 | 0.637 | N.S.* |
| | Within groups | 68 | 1.905 | 0.029 | | |
| Total Monthly Income after retirement | Between groups | 2 | 0.007 | 0.003 | 0.063 | N.S.* |
| | Within groups | 72 | 3.774 | 0.054 | | |

*N.S.= Not Significant

**Table-3:** 't'-test Values showing difference in perception of the respondents regarding aging and their gender.

| Variables | Gender | N | Mean Value | df | t-value | Level of significance |
|---|---|---|---|---|---|---|
| Vadodara city | Male | 127 | 3.13 | 198 | 1.701 | 0.05 |
| | Female | 73 | 3.25 | | | |
| Ahmedabad city | Male | 127 | 1.95 | 198 | 1.975 | 0.05 |
| | Female | 73 | 1.88 | | | |

The results Table-3 shows that there was significant relationship between the perception regarding aging of respondents of both the cities (Vadodara and Ahmedabad city) and their gender. Hence the null hypothesis was accepted.

## Conclusion

It can be concluded from the findings obtained that in both the cities were living with their spouse. More than one half of the respondents were not employed at the time of data collection while less than one half were employed having their monthly income ranging between Rs. 10000 - Rs. 35000. It was also found that the majority of the respondents of Ahmedabad city had negative perception regarding aging; it may be due to their present employment and gender which was found significant. Majority of the respondents of Vadodara city had positive perception regarding aging, this can be due to their age, retirement period and gender as found through statistical analysis. This can be associated because the respondents of Vadodara city were younger in age and majority of them were females and majority of them have recently retired from their jobs as compared to Ahmedabad city. Aging can have impact on one's perception (negative or positive) therefore limiting their human potential. As elderly are foundation of our society and a valuable resource for our society, therefore provisions can be made to help them to have positive perception regarding aging. Better employment opportunities can be opened up for them so that they can have regular source of income after retirement and live comfortably and independently. Better health facilities can be provided to them and those living alone can have group or organization where they can spend time, share, work and be independent through earnings.

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