Investigating The Social Aging Process Through Data Mining

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Abstract

Social aging is the phenomena that today's society faces. We all know that aging is natural and can't be stopped or prevented. But a variety of different factors like economic and cultural problems, Loneliness, low living standards along with social isolation can pose a threat to individual along with the society they live in.

Thus government, the society along with the individual must join hands in order to prevent such issue and also find appropriate solutions to avoid or prevent it from happening. This paper deals with various factors like stress, anxiety, financial condition, education level, how to deal with children of different age group. Clementine software along with Chaid model is used in this paper with data mining approaches.

Keywords: Social aging, Clementine Software Data mining
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Introduction

Due to the drastic technological leap, we are living witness to the drastic ongoing change. Human life patterns are changing due to complex concepts and phenomena. Humans are always thinking about financial growth, physical skill sets, the gap between young and adult, people viewpoint, and expectations from life has been completely changed. This paper focuses on the psychological and personal requirements of individuals to find a link in behavioral patterns.

This paper plays a crucial role in improving life satisfaction, living standards along behavioral patterns thus generally reducing the aging process

Literature review

The roots of social aging theory can be traced back to the post-war era. Social aging emerged as an interdisciplinary discipline during that period (Phillipson, 1998). The need for this social aging theory was born because of the government interference to achieve specific outcomes in health and social policies for the senior citizens and to achieve an equilibrium between the socio-politic and economic environment (Mirmozaffari, 2018). Using expert medical techniques in modern computers could help to determine and diagnose different disease and counter them effectively.

Methodology

There are generally three unique criteria for measuring age.

1. Chronological age – Measures an individual's age from their birth to the present. Interviewees were met in a poll was first arranged, and in light of the inquiries gathered in this survey

2. Physiological age – Measures an individual's age based on the side effects due to the diseases they suffered over time and with physiology [Mirzapour,2020].

3. Mental age- Measures an individual's age based on the mental, emotional, and expressive state of mind. The World Health Organization categorizes life after adolescence according to chronological age.

   a. Middle age: From age 35 to age 59.

   b. The elderly: From age 06 to age 47.

   c. Old: From age 75 to age 90.

   d. Very Old: 90 or older.

Premature aging occurs when an individual exhibits the signs and symptoms of old age before

the age of 60 years. Various factors like stress, economic and financial problems, violence, etc. contribute significantly to the aging process. [Mirzapour,2020].

Problem definition

The issue of social aging is the core problem in this paper which is being faced by the societies at large and various studies are centered around it.

Proposed Operational Model

In this proposed model different information mining measure tasks including information assortment, information arrangement, preprocessing, and the use of different information mining calculations are performed. Then, the proposed model is the Chiad model. At the information assortment stage, the data expected to execute the undertaking is gathered through meetings with the objective of a network test. interviewees were met in four distinct sets and the results were introduced in an SPSS record.

At long last, the accompanying four sets are examined:

a. Set 1: This part is the biggest number of interviewees which was around 1602, including youthful and moderately aged individuals, who were met by the arbitrary choice of family unit phone numbers.

b. Set 2: It included 689 people 65 years and more established.

c. Set 3: It included 552 from a progression of grown-ups.

d. Set 4: It included 72 African Americans just as 54 older from Latin America and Spain.

In the information preprocessing step, information credits were characterized also, after information arrangement, different information mining models were used to look at the information by utilizing Clementine programming. One of the models utilized is the Chaid model, which is a model of choice

Results

In this examination, the yield field analyses how individuals feel about their age. The anticipated qualities for responding to this inquiry incorporate three after alternatives:

a. Choice 1: They feel more youthful.

b. Choice 2: They feel more seasoned.

c. Alternative 1: They feel to be a similar age.

In light of the previously mentioned choices, the accompanying outcomes have been acquired

from the assessment

Table 1: Results that obtained from evaluation

Options	Percent
They feel younger	% 52/4
They feel older	%7
They feel to be the same age	% 35/7
They did not respond or refused	%4/7

Source: (Mirzapour, 2020)

The principal layer of this tree, which is situated after the primary hub, depended on Field K10 and because of the topic of how old you feel. At this level, respondents were sorted by age bunches under 35 years, between 35 to 45 years, between 45 to 59 years, between 59 to 80 years, and more than 80 years. At last, in all age bunches over 75% of respondents felt more youthful than their genuine age.

The following degree of the tree was shaped dependent on field K8. This field asks the respondents their genuine age. At this level, a great many people between the ages of 26 and 45 announced themselves more youthful and those under 26 proclaimed themselves more seasoned than the real level. At this level, age bunches somewhere in the range of 45 and 59 years were approached to react to the accompanying Field 13 inquiry: Do you figure you shouldn't work when you get more established? Over 95% of the individuals who addressed yes and over 75% of the individuals who addressed no said they were more youthful than their real age. In the interim, the age gathering of over 59 years was asked to answer the accompanying inquiry: Do you figure you will have less pressure when you get more established? The majority of individuals didn't respond to this inquiry. Individuals more than 80 were additionally posed the accompanying inquiry: Do you feel more seasoned than you are? A great many people feel to be more youthful.

Conclusion

At long last, about a portion of individuals felt more youthful and the other half felt a similar age. Sociological and mental considers permit governments and authorities to look at the network. In doing as such, they can anticipate the future by contemplating the current circumstance. Clearly, in a general public where individuals feel youthful and cheerful, profitability and proficiency, portability and elements can be a lot higher than in other social orders. Higher profitability can drastically build the advancement and greatness of social orders. Governments ought to think about proper projects to improve expectations for everyday

comforts, increment future, and advance network work process by looking at the status of society.

References

a. Mirmozaffari, M. (2018), Eco-Efficiency Evaluation in Two Stage Network Structure: Case Study: Cement Companies", Iranian Journal of Optimization (IJO), Vol 11, Issue 2, pp 125-135.

b. Mirzapour, A. (2020), Investigating the social aging process using data mining techniques, International Journal of Multidisciplinary Research and Development, Vol 7, Issue 1, pp 73-75

c. Phillipson, C. (1998), Reconstructing Old Age. London: Sage Publication.

d. Turner B. (1989) Ageing, Status Politics and Sociological Theory, in British Journal of Sociology. 40:588- 606.