Keywords: Ageing-Well, Psychology, Dignity of the Elderly, Inclusion, Human Computer Interaction.

Abstract: As people grow older, they start craving for their family and need filial support. In a family setting, elderly contribute largely to the betterment of their family. This paper redefines Positive and Negative Engagement in an elderly setting, and works to define various aspects within it, and analyse its impact on the dignity and the psychology of the senior citizens. Self-Fulfilment and the feeling of being wanted, has been hypothesized as being the most essential for the aging population and the research has been directed along the same lines. Further, the role of technology in helping restore elderly dignity has been penned, and how it can improve interactions with their family. This paper also includes methods to understand the mind-set of the ageing population, to understand what the concept of “Ageing well”, means for them. This paper being theoretical, a taxonomy has been generated, anticipatory results have been tabulated, and proposed model for applying Human Computer Interaction to restore dignity has been generated, including all factors that affect the concept and are crucial to get right. This paper focusses on the psychology of the elderly, and what exactly shapes it, and how it is related to their dignity.

1 INTRODUCTION

Familial Heredities are one of the most fundamental and seeding roots in a person's life: people essentially start their life journey with family and end with them. The first influence on a person's life is from the parents and that influence continues, to the end. Now, while the bond stays in homeostasis (speaking in a general context (does not include every case), despite emotional turbulence), age doesn't and cannot. The interactions and social participation in one's younger days would be quite different from that of when they are older. When a person is young, they have a lot of social interaction with friends, colleagues, bosses, juniors, family, and relationships; but when a person ages the only interactions they get limited to, is maybe with their neighbours, partner, relatives, and children. The active social life comes seemingly to a halt, and a person spends more time with themselves and with their near and dear ones. This increased interaction with self must be insured with optimal and a guarded mental state. This gives birth to the concept of ‘Aging Well’ (Halaweh et al., 2018).

Access to different resources at different periods of time, generates the term Subjective Well-Being, wherein a person’s needs is subjective, and can be evaluated only by evaluation of life and effect not being a collective trait at all (Keyes, 1998).

2 MOTIVATION AND OBJECTIVE

Engagement is essential for senior citizens to occupy themselves. Engagement, in a general preview is said to have three components, concentration, interest and enjoyment. The primary source for this for elderly, is their family, and their maximum interactions happen with their partner, children, and close relatives (Shernoff et al., 2003). It is said that humans have three innate needs, which they desire to have fulfilled, throughout their lives: competence, autonomy, and relatedness (Ryan & Deci, 2000). These needs get further heightened in the elderly, who have taken their break from the load of work and have finally settled down to live their lives at a slow pace. This paper...
posits both Positive and Negative Engagement and Interaction (Government of South Australia, 2016) being commanded by Senior Citizens in a family setting, and how they depend on these interactions to fulfils their innate needs which is essential for them to “Age Well”.

This is the main motivation of the paper, to hold on to the past (by walking alongside the elderly), while moving forward towards the future (by helping them take a step forward towards graceful ageing, by reviving their dignity). Positive Engagement and Negative Engagement is outlined which differs from the definition considered standard in the sphere of mental health, cognition, and psychology (Vallerand et al., 2003), but have been modified to suit the strata. The reasons for both have been stipulated, and methods to increase positive engagement and decrease negative engagement in the perspective of the psychological dimensions of the elderly have been suggested.

3 METHODOLOGY

This paper employs the following steps to have an in-depth and through analysis of the concept of “Ageing Well” and understanding how important dignity is for the elderly, how they expect it to be preserved, where exactly it lies for them, and what steps can be taken by a family to support their elderly and to make the family as close-knit as possible.

Identifying the key aspects, shall help understand how engagement can affect the self-esteem of the elderly. Classification of these aspects, help in differentiate between the outcomes of interactions and engagement and in Analysing and Identifying methods for assessing these aspects. Thus, giving an overall wholistic approach to understanding the concept itself, and the way engagement affects it. A model is proposed based on anticipated results stemming from the notion of how the elderly interact with technology, and how Human-Computer Interaction as a concept helps in the promulgation of technology among the elderly.

4 DISCUSSION

The methodology adapted, is aimed at conducting a complete study on the concept of graceful ageing. Further, to support the study conducted, data collection methods have been outlined, which shall supplement it, and help get a further understanding of the concept, which is essential before proposing suggestions to solve any underlying obstacles. While this paper only posits the data collection methods, no actual data has been analysed. Nevertheless, based on current research, a model has been proposed, that employs technology as a tool to revive the dignity of the elderly. This is depicted in figure 5 and shall be further refined and enhanced post data collection. This section details on the methodology adapted.

4.1 Identifying Key Aspects

As people grow older, their self-esteem gets linked with the respect they receive from their family, and that comes through the type of engagement they have. Below are the key aspects of senior citizen engagement:

4.1.1 Taxonomy

The following taxonomy includes various factors important to mental gratification in old age:

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4.2 Classification and Thorough Study of Aspects

Following are the methods of engagement that are common in the lives of the elderly. These include the aspects outlined and many adjoining important
factors that contribute to their living and psychological state.

4.2.1 Positive Engagement

Positive engagement has been defined as positive interactions between family and elderly that lead to positive outcomes, improving relations, experiences, future decisions, and trust. Aspects for positive engagement are seen as follows:

- **Support (PSUP)**
  
  As elders transition into their later life, their perceptions become more profound, and parent-child relationships become very important; to stay happy and healthy (Branson et al., 2019). The elderly does their best to support their children through social hardships and this fosters a familial support is extremely essential for people after retirement, when their family becomes the most important thing they have in their lives, to take care of. (Silverstein & Giarrusso, 2010) It has been postulated, that having children in old age, might even increase morality and longevity of life, due to support provided by family (Modig et al., 2017). While studies have focused on the aspects of parents receiving help from their children for a long time now (Stoller, 1983) (Dinkel, 1944) (Ikkink et al., 1999), which of course is essential to understand the psyche and mindset of the elderly; the support that their family provides, is more innate to maintaining the dignity of the elderly. Studies also show that the support from parents to their children through their life changes form as time progresses, and although on the decline, is significant when parents reach their old age (Cooney & Uhlenberg, 1992).

  The elderly, having knowledge about their younger family’s career moves, feel in touch with the evolving market, allowing them to feel self-reliant (most people feel a void after having continuously worked for as long as they can remember, and are now retired) which gives them a sense of purpose (Osborne, 2012) and can help them cope with death anxiety.

- **Guidance (GUID)**
  
  Everyone needs to learn about the mistakes that have occurred in the past to not repeat them, avoid pitfalls, succeed, and someone to tell them that it is fine do take risks and make decisions that are required and essential to their career and social life, even though they might seem laborious in the beginning (Mancini & Blieszner, 1989). The wisdom that stems from experience, is best given by elderly in the family: parents, aunts, and uncles, who people know have their best interests at heart and whom they trust. This trust helps them understand that the advice is coming from a good place, and they would not be at a loss if they choose to abide by it. Experience that elderly have, gives their children and family a guideline that they can follow, a basic skeleton of rules that they know if they cross, they might fall into trouble and more importantly where they can surpass it in order to achieve more than what their parents did.

  When the elderly sees their family take up their advice and move forward in life, they gain a sense of self-gratification, becoming encouraged to dig into their past for better advice. They become more liberal and begin to see past the constraints that had been put on them while they were growing up and were in their adulthood, or those which they had self-imposed on themselves, and begin to see the world in a better light with increasing wisdom. The copious astuteness they stand to gain not only from there past experiences, but also from a mature perspective of the issues that the younger part of their family faces, is invaluable not only to them, but also to their family. This engagement helps both factions in increasing their mental propriety.

- **Scaffolding (SCAFF)**
  
  Scaffolding is seen from the context of classroom learning (Bliss et al., 1996), but it is pertinent in real-life too. When family falls into trouble, elderly of the family can give an objective perspective on the same. Therefore, it becomes easier to come up with prospective solutions that can be implemented to solve this problem. Elderly can also help their family understand which of the alternative solutions might be most effective and what would be the best way to implement it. But this cannot be done all at once. Problems take time to become full-blown enough for the family to speak to their elderly about it, or ask for help (while people might be close to their elders, they tend to hide their problems from them for the fear of rejection of the problem altogether, or the fear that they will be greeted with a lack of support, or simply because they do want to put their
elders in a position of worry) and therefore it would require a lot of time to be unravelled as well. Ergo, it needs to be broken down into chunks, and solutions for each smaller problem needs to be dealt with, one at a time. The advice on how to do this can also be given by the elderly, which if the family follows, they are at a better chance of getting their lives back on track which is what the elderly thrive for.

4.2.2 Negative Engagement

Engagement between the senior citizens, and the younger part of their family might not always be a garden of roses. They will always have their differences, and that shall affect both parties, especially the elderly because their family means much more to them emotionally and is a much larger part of their life than the younger faction (Clarke et al., 1999). Aspects of negative engagement are as follows:

- **Clash of Opinions (CLOP)**
  While the older demographic is prone to thinking about what shall occur in the long run and making decisions based on how it might affect their future, the younger demographic is interested in taking decisions that will make their present life better, and not worry about how it will impact their future in the same situation. This leads to a clash of opinions, wherein elders have a very mature and farsighted approach and perspective towards a status quo, whereas their family seem to think that their ideas are far-fetched and too constrained and binding. This does not foster a healthy environment and has an adverse effect on both factions (Birditt et al., 2017), more on the former than the latter, since they soon after, feel socially obligated to be the understanding and shrewd party who is supposed to cotton on.

  People generally are at a loss of words when they go and meet their elderly, because they do not have any common topics of interaction. They feel that their parents and elders in the family, are very out-of-touch, conservative, and backdated, and do not display any interest whatsoever, in speaking to them. These awkward conversations and fights, have an adverse effect on the psyche of the elderly, and they begin to feel unwanted and useless, which is not the case: especially not what the younger demographic wants their elders to believe.

- **Independence (INDP)**
  A child-centric environment fosters protectiveness of parents/elders towards the younger members of the family. But, this might become extreme as the children grow up; they require their own space and the freedom to live their own life, but because parents are overly attached to their children they start interfering in their decisions and this leads to negative engagement. Helicopter-parents are generated, (Fingerman et al., 2012) who constantly want to be a part of their children's life and are not able to detach themselves from them. While the younger demographic is right in wanting to live their own lives on their own terms, they forget that their elders are a huge part of it and end up disrespecting their concern which has an adverse impact on the psyche of the elderly, who feel unwanted and disregarded, which is not essentially the case. Upon the smallest of spats, elders end up feeling like they're losing their dignity every time they speak to their children and younger family members and feel as though they are a burden on their family; there should be a symbiosis of support: the children rely on their parents for guidance and elders rely on their younger family for emotional support and sustenance.

  Also, having worked for everything that they've achieved throughout their lives, most elders want to be completely independent and do their work on their own, without any support from anyone. Unfortunately, their body might not agree with their mindset, and they need to rest more, which they might feel hampers their independence.

- **Attitudes (ATT)**
  Attitudes are the culmination of reactions to external stimuli, which shapes your future thinking, arising from your belief system and thought process. Beliefs and Faith are indoctrinated by a person’s family, but as time progresses, a person becomes his choices and proficiencies, but elders in the family, expect younger family members to remain the same, they have developed their beliefs based on events that they have encountered in life, and teach their children everything that they did right and wrong. Unfortunately, this teaching turns to imposition. Instead of generating empathy, engagement generates judgement; while the elders are not wrong in wanting their children to take the idealist path that they
seemed to have taught, they sometimes might fail to understand that their children react to situations and might have made different choices on second thoughts. In fact, parental views on aging and lifestyle might change due to their relationship with their adult children, and differences of attitudes and opinions (Jung & Jopp, 2019).

- **Priorities (PRIO)**
  As a person grows, priorities change. It is essential for a person to objectively reflect on her life and decide what needs to be done at a given point of life, wherein they face dilemma and turmoil. Parents always look at their children's lives objectively, and generally from afar, hence they have their own take on what their child should prioritize, which might not sit well with the latter. Every time that they tell their children that they are not prioritizing the right things, children feel hurt and believe that their parents do not have any faith in them or in their life choices, and answer back, maybe rudely. This makes the elders feel that their children do not respect them anymore and are not even ready to listen to their opinions which hurts them and makes them feel as though they are losing their self-worth (Pyke, 1999).

5 **ANALYSIS AND RESULTS**

A basic reason for differences between the two demographics, might be the lack of communication, and a large and potent difference of attitudes, along with the need for healthy independence from each other.

5.1 **Key Practices**

One must understand the paramount needs and issues that the elderly have, hence there is a need to collect data on the same. Practices to be ensured are:
- Acknowledgement of support that both factions get from each other
- Understanding by the younger demographic that everything that their elders tell them, comes from a place of concern and they must not reject it outright.
- Taking of an effort by younger members take, to change their habits to match the expectations of the elder members of their family.
- Mitigating attitude clashes; if the elderly are dead set in their ways, the younger members of the family should adjust and try to make things right.

5.2 **Surveys**

Surveys are a method of collecting quantitative data, that shall help us generate an idea of what exactly the elderly feel, and how they have or do react to their feelings, which shall be matched quantitatively through the answers that they provide via a scaled metrics (ranging from 1-5). There shall be two set of questions: one for the elderly, and the other for the family, and along with the rating questions, there shall be two open ended question, which shall help encompass and understand the feelings that the two factions have towards each other. This study suggests metrics for further field study, which shall be conducted. To tabulating the results, and draw conclusions and suggest measure to improve the dignity of the elderly, it is important to collect prior information such as (non-exhaustive questions):
- What did the survey takers do in their previous jobs?
- Did they spend a lot of time away from their family?
- Have they been over-protective of their children?
- How often do they now interact with their children?

This information should be asked after the survey is taken, to help divide the takers into categories based on their jobs, the style of parenting they adopted as their children grew up, how they interact with their children now, and how often they interact with their children.

5.3 **Interviews**

Interviews can be conducted by answering open ended questions which shall give a complete perspective on what the elderly want in order to “Age
Well”; what their expectations are, what they need, and what their family can do, which is not being done that shall support them in a better fashion. There might be a sense of duty they feel towards their family, what they do to exercise it and what they want to do, shall be better understood. This collection of quantitative data can then be pooled, and trends and similarities in various answers can be observed, to give a better understanding, with a scientific perspective of concept of “Ageing Well”.

The figure above, shows how using the implementation of the above given suggestions, and results that shall be tabulated from the surveys and interviews, one can create a model, that can support the revival of dignity of the elderly.

5.4 Results

While making the elderly happy is an easy task, sustenance of that happiness is essential to help the process of “Aging Well”. Anticipated results of interactions with technology are:

- Not able to work the device due to lack of instructions
- Incomprehensibility of interface
- Squinting over the interface to understand the font
- Lack of interest
- Frustration due to inability of work the device
- Improvement in mood upon successful working
- Feeling of proud achievement

Along with familial support, it is paramount for the technology to be broad enough to include the elderly. When the younger members of the family, shall see that their elderly are working towards involving themselves in the current world scenario, they will have a lot of more common topics to interact on. This shall help them feel more confident, independent, and self-sufficient.

Technology is the best method to keep the elderly connected with the world because they would not need to step out of the house, or even move out of their resting spots to interact with the world, and their families, and help them feel productive and self-reliant with least physical effort. The elderly should be given a piece of technology to handle, and their interactions, should be monitored, to understand the issues that have while handling it. Further, there should be a user story drafted, that can encompass all common traits and a few quirks. This would help cover all pain-points of the user, to make the interface completely inclusive for them.

It becomes very important for them to be mentally satisfied for them to have ‘Aged Well’. Their mental satisfaction lies in the well-being of their family. Hence, engagement becomes extremely important to promote healthy ageing. A user story should be written to include all aspect of a senior citizens’ life, and a case study must be developed accordingly, which can be analyzed to understand the underlying factors to define the dimensions of “Ageing Well” and develop technology that can supplement and uplift filial support.

6 PROPOSED MODEL

Based on the anticipated results, the following model has been proposed:

As technology is modified to encompass their needs by becoming more inclusive, it shall bring the elderly into the changing world. Enhanced Human
7 CONCLUSIONS

The future scope of this study would be to focus on the analysis of the answers that one shall receive from the surveys and interviews and making changes to the proposed model. The study on the behavioural aspects of “Aging Well” shall help get a scientific understanding of the concept itself, and collecting all information, mapping it appropriately, to predict behaviour upon certain input stimuli by creating a model that can do that, which would be the next step forward to understanding social concepts algorithmically.

One can therefore derive, that while certain aspects of “Ageing well” is common for everyone, each person will have their own needs to be fulfilled for accomplishing the concept; and the degree of demand of fulfilment of a need, shall vary according to the dimension of the need, and how well set into the story of each individual it is (Kapteyn, 2015). The meaning of dignity too, changes for older adults; from being self-reliant, and understood by their family. Studies show that to have themselves acknowledged, elders even tone down their illnesses, to preserve their dignity (Clancy et al., 2021). To help revive the dignity of elders, it is essential to include technology, and use it as a weapon (by understanding their current interactions and use it to inspire future changes) to restore elderly dignity and help them “Age Well”, through fulfilment, and mental satiation.

REFERENCES


