Role of Mindfulness and Self-efficacy in Resilience among young and older people

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Abstract

Aging, in terms of young adulthood and old age, come with various physical and psychological challenges. In order to cope with these challenges in a healthy manner, the traits of mindfulness, self-efficacy and resilience are of immense importance. This study was aimed at studying the age-related differences between young adults and elderly population with respect to these three constructs of positive psychology. Moreover, the relationship between the construct was also found. The study employed quantitative design wherein Five-Facet Mindfulness questionnaire, General Self Efficacy Scale, and Connor Davidson Resilience Scale were administered on a total of 199 people out of which 99 were elderly and 100 were young adults. The statistical tools of t-test and correlation were used for analysis of data. The results revealed that there is a significant and positive correlation between mindfulness, self-efficacy and resilience with resilience and self-efficacy sharing the maximum correlation (r = 0.59). It was also concluded that the mean score on mindfulness and self-efficacy scales were significantly higher in elderly participants than the young adults. No significant differences were found between the two age groups in case of resilience. With a dearth of existing literature on these three constructs specifically in relation to age, this study offers a welcome insight into the topic and encourages further research on the same. It highlights potential for developing interventions to enhance these positive traits across various age groups.

Keywords: Elderly, Mindfulness, Resilience, Self-efficacy, Young Adults

INTRODUCTION

Mindfulness refers to “an openness to novelty, a process of actively drawing novel distinctions” (Langer, 2002). Langer further added that “when we are mindful, we become
sensitive to context and perspective; we are situated in the present. When we are mindless, we are trapped in rigid mind-sets, oblivious to context or perspective. When we are mindless, our behaviour is rule and routine-governed. In contrast, when mindful, our behaviour may be guided rather than governed by rules and routines”. According to Shapiro & Carlson (2009) mindfulness is “remembering to pay attention to our present moment experience”. The current study is based on three major constructs—mindfulness, resilience and self-efficacy. These three positive emotional and cognitive states have gained the attention of various researchers in the field of positive psychology.

Naik, Harris & Forthun (2013) identified three key features of mindful awareness including purpose, presence and acceptance. Scientific research on mindfulness gained a thrust with the work of Dr. Jon Kabat-Zinn, where he focussed on the clinical applications of mindfulness in relation to chronic pain and stress-related illnesses, which ultimately served as the foundation to the development of mindfulness-based stress reduction technique. In order to be mindful, one is required to overcome the desire to reduce uncertainty in daily life, override a tendency to engage in automatic behaviour, and to engage less frequently in evaluations of self, others, and situations (Snyder & Lopez, 2007).

Mindfulness has positive psychological, physiological as well as spiritual benefits (Davis & Hayes 2011; Maral & Pande, 2020). Similarly, people who have exposed to natural disasters like earthquake, flood, and so on recovered faster from PTSD symptoms by undergoing mindfulness trainings (Maral, 2019; Eriksen, & Ditrich, 2015). A study by Flook et al (2013) on the impact of mindfulness on teachers, revealed a reduction in psychological symptoms and burnout, improvements in observer-rated classroom organization and performance on a computer task testing the attention, as well as increases in self-compassion. A study by Shapiro et al. (2008) found that “mindfulness reduces perceived stress, negative affect, anxiety and rumination and significantly increases self-compassion and positive affect”. Another study by Ryan & Deci (2000) revealed that “mindfulness and autonomy may increase emotional, psychological and social wellbeing”. In a study conducted by Parto & Besharat (2011) on high risk adolescent students in Iran found that “as a protective factor and a powerful supporter in the developing, strengthening and boosting of other protective factors (including self-regulation, autonomy, health and well-being) and weakening of risk factors (including psychological distress and negative affects and emotions), mindfulness can play a significant role in building healthy and decreasing vulnerability among adolescents”. Thus, studies conducted on mindfulness establish relationship between mindfulness and various
other factors and show a direct relation between mindfulness and psychological wellbeing in different settings and age groups.

The second factor that the study takes into account is ‘resilience’. Resilience, in simple terms refers to bounce back from adverse life situations. According to Masten (2014), resilience is “the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development”. The concept can be applied to a broad range of systems ranging from children and families to institutions and societies.

Resilience has recently gathered increased attention from the researchers and various interesting studies have emerged. Initially, resilience was studied at an individual level and there was this idea of ‘the invincible child’. Eventually, however, the resilience researchers came to realise that a lot of factors that promote resilience actually arise from the external environment of the individual. Thus, the focus of studies shifted to finding factors at not only individual but also at family, community and cultural levels. Studies also try to understand how protective factors interact with risk factors and other protective factors to support resilience. According to a study by Rolf et al. (1990), there are several factors that may impact resilience in childhood and adolescence including family factors, community factors, coping skills, self-evaluation patterns among others. Resilience has been studied in relation to various variables. A study by Artuch-Garde et al. (2017) on the relationship between resilience and self-regulation revealed significant and positive correlation between the two. Moreover, it was also found that “Learning from mistakes (self-regulation) was a significant predictor of coping and confidence, tenacity and adaptation, and tolerance to negative situations (resilience)”. Studies also highlight the role of resilience in subjective wellbeing. A study by Rodriguez-Fernandez et al. (2018) found “the influence of resilience and subjective well-being as decisive psychological variables in the prediction of school engagement and perceived performance”. The study also highlighted the need to foster “education of resilience and subjective well-being to improve academic achievement among adolescent students”.

The third positive factor in this study is self-efficacy which refers to one’s belief in their ability to accomplish a certain task. According to Bandura (1997), self-efficacy can be defined as “peoples' beliefs in their capabilities to produce desired effects by their own actions”. Self-efficacy is a learned pattern of thinking and is influenced by several factors such as childhood experiences, previous successes in similar situations, modelling,
visualisation, verbal persuasion, arousal and emotion and also certain neurobiological factors. It is based on the social cognitive theory which states that humans actively shape their surrounding as opposed to the belief that humans are mere rectors to environmental stimuli.

Several studies have been conducted with respect to self-efficacy and its relation with various other factors such as academic achievement, motivation, satisfaction etc. A study by Schunk (1989) conducted on children with disability showed empirical evidence supporting that self-efficacy was a predictor of student motivation and learning. Another study by Yusuf (2011) also found that self-efficacy beliefs “significantly enhanced learning attainment”. A study by Betoret et al. (2017) revealed that “students’ expectancy-value beliefs play a mediating role between academic self-efficacy and the achievement/satisfaction relationship. Self-efficacy has also been found to be a successful predictor of organization commitment as revealed in a study by Saleem et al. (2012). Studies such as one done by Rand (2017) also establish that hope, self-efficacy and optimism, though structurally distinct parameters, are “differentially related to important life outcomes including psychological adjustment, coping, and goal-directed performance”. Moreover, various studies attempt to establish relation between these variables. Study of self-efficacy conducted on school children by Hautzinger et al. (2005), reported low depressive symptoms, low dysfunctional thoughts and better physical and emotional wellbeing among children having high self-efficacy. These factors also indicate higher resilience. Among adolescents, studies found that higher general self-efficacy was related to lower self-reported health problems (Cheever & Hardin, 1999). It was also found in another study by Tong & Song (2004) that adolescents belonging to low socioeconomic strata benefited from higher self-efficacy with respect to life satisfaction and subjective wellbeing. Another study by Skoch (2003), found that “self-efficacy and the ability to articulate coping responses were important personality characteristics that distinguished the resilient group from the maladaptive youths”. Correlation was also found between resilience and impact of self-efficacy and coping strategies.

Sanaei et al. (2014) conducted a study on cancer patients which concluded that mindfulness training was effective in increasing a person’s self-efficacy. Another study by Davis et al. (2018), on the other hand, concluded that there existed no significant difference between students receiving mindfulness training with respect to their self-efficacy.

Study by Bajaj & Pande (2015) found relation between mindfulness and resilience. The findings reveal an important role of resilience “in mindfulness exerting its beneficial effects.
This study also contributed to the potential mechanism of the association between mindfulness and subjective well-being”.

With respect to different age groups, studies have been conducted that establish the importance of resilience, mindfulness and self-efficacy in successful aging (MacLeod et al., 2016; Zaragoza & Prakash, 2017) however, little work has been done on the age-related differences with respect to the three factors. Study by Doba et al. (2016) found no age-dependence with respect to self-efficacy in the elderly. Another study by Singh et al. (2010) found perceived self-efficacy to be an important predictor of mental health among elderly males as well as females. The present study aims to understand the relationship between mindfulness, self-efficacy and resilience and how these psychological states differ in terms of age (young adults and elderly population).

Resilience, self-efficacy as well as mindfulness can undoubtedly be considered as important parameters in one’s life. This study is aimed at identifying relationships between these parameters and to see if any differences exist with respect to different age groups. Very few studies have attempted to tap into age-related differences in self-efficacy, mindfulness or resilience. By understanding these differences, one may better be able to understand the factors that may foster or obstruct the proper development of these characteristics in individuals. One may also be able to better understand the changes that may accompany old age as a result of differences in these three characteristics. Both old age and young adulthood are important phases in one’s life. By identifying the surplus or lack of these characteristics in these age groups, the researchers will be able to identify the related or resulting issues and also find ways to enhance these characteristics in these individuals if at all found lacking. One may also be in a better position to design interventions for enhancing one’s quality of living when concerned with these parameters.

Objectives

The objectives of the study are stated as follows: -

1. To identify the relationship between mindfulness and resilience.
2. To identify the relationship between self-efficacy and resilience.
3. To identify the relationship between mindfulness and self-efficacy.
4. To explore whether young adults and the elderly differ significantly in their mindful ability.
5. To explore whether young adults and the elderly differ significantly in resilience.
6. To explore whether young adults and the elderly differ significantly in self-efficacy.

The following hypotheses have been formulated for the purpose of the current study:

1. There would be a positive correlation between mindfulness and resilience.
2. There would be a positive correlation between resilience and self-efficacy.
3. There would be a positive correlation between mindfulness and self-efficacy.
4. The mindful ability of elderly people would be higher than mindful ability of young adults.
5. The self-efficacy of elderly people would be greater than self-efficacy of young adults.
6. The resilience of elderly people would be higher than the resilience of young adults.

METHOD

Sample

The sample for the purpose of the current study includes participants from the elderly population (above 60 years onwards) and young adult population (18 to 25 years). Three scales were administered on two elderly people and two young adults by each researcher. The scales were administered on a total of 199 people out of which 100 were young adults and 99 elderly.

The sample distribution based on demographics of gender and age group has been summarised in the table below:

Table 1: Distribution of sample with respect to age group and gender

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Males</th>
<th>Females</th>
<th>Total (N=199)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young Adults (18-25 years)</td>
<td>52</td>
<td>48</td>
<td>100</td>
</tr>
<tr>
<td>Elderly (60 years and above)</td>
<td>49</td>
<td>50</td>
<td>99</td>
</tr>
<tr>
<td>Total sample (n = 199)</td>
<td>101</td>
<td>98</td>
<td>199</td>
</tr>
</tbody>
</table>

Measures
Three scales were used for this study including Five Facet Mindfulness Questionnaire, the General Self-Efficacy Scale and the Connor Davidson Resilience Scale.

The Five Facet Mindfulness Questionnaire developed by Baer, Smith, Hopkins, Krietemeyer & Toney (2006) is based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience. The Scale demonstrated adequate to good internal consistency with alpha coefficients ranging from 0.75 to 0.91. Findings also provide good support for construct validity. The scale has also been adapted in Hindi by Mandal et al. (2016). The reliability of the adapted version of the full scale was found to be 0.85. The scale comprises of 39 items, each with five options - Never or very rarely true, Rarely true, Sometimes true, Often true and Very often or always true.

The General Self Efficacy Scale developed by Schwarzer & Jerusalem (1995) is a self-report measure of self-efficacy. It comprises of ten items, each with 4 options – not at all true, hardly true, moderately true, exactly true. The scale has a good internal reliability with Cronbach’s alpha values between 0.76 and 0.90. With respect to validity, the General Self-Efficacy Scale is correlated to emotion, optimism, work satisfaction. Negative coefficients were found for depression, stress, health complaints, burnout, and anxiety. This Scale was also adapted in Hindi by Sud et al. (1998).

The third scale, i.e. the Connor Davidson Resilience Scale (CD-RISC) was developed by Connor & Davidson (2003). The full version consisting of 25 items has been used for the purpose of this study. CD-RISC-25 showed acceptable test-retest reliability with a coefficient value of 0.87. In their publication in 2003, Connor & Davidson also established considerable construct validity for the scale. The scale has also been adapted for the Indian population by Singh et al. (2018) and indicates good convergent validity.

**Procedure**

For the purpose of the current study, the Five Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer & Toney, 2006), The General Self Efficacy Scale (Schwarzer & Jerusalem, 1995), and the Connor Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003) were administered on a total of 199 people out of which 99 were elderly population and 100 were young adults. Firstly, during the stage of forming a rapport, the
participant was briefed about the nature and purpose of the study along with information about the participant’s rights and ethical considerations. The participants were provided with the informed consent form and once they had read and voluntarily consented to being a part of the research, the instructions with respect to each scale was provided to them. Their preliminary information was noted down on the response sheet following which the participants continued with filling the questionnaires. Any confusions or doubts were cleared beforehand. Once the participant was through with all the responses, it was ensured that no item had been left blank unintentionally. The participants were then thanked for their time and willingness to participate and it was confirmed if they’d like to receive a copy of their results and/or the final conclusions of the study. Once all the data collection was completed, the scores were calculated for each scale and the data was entered onto a Microsoft Excel Sheet. The data was then analysed using statistical tools of correlation and independent T-test in the MS Excel Analysis ToolPak and the results were then interpreted.

**Scoring**

In order to score the responses of the participants, the following process was followed for separate scales:

*Scoring of Five-Facet Mindfulness Questionnaire (FFMQ)*

To score the FFMQ, in case of non-reverse items, a score of 1 was given for option 1 (never or very rarely true), a score of 2 was given for option 2 (Rarely true), a score of 3 was given for option 3 (sometimes true), a score of 4 was given for option 4 (Often true) and a score of 5 was given for option 5 (Very often or always true). In case of reverse items, a score of 5 was given for option 1 (never or very rarely true), a score of 4 was given for option 2 (Rarely true), a score of 3 was given for option 3 (sometimes true), a score of 2 was given for option 4 (Often true) and a score of 1 was given for option 5 (Very often or always true). The reverse and non-reverse items have been listed below:

| Reverse Items | 3, 5, 8, 10, 12, 13, 14, 16, 17, 18, 22, 23, 25, 28, 30, 34, 35, 38, 39 |
| Non-reverse items | 1, 2, 4, 6, 7, 9, 11, 15, 19, 20, 21, 24, 26, 27, 29, 31, 32, 33, 36, 37 |

After all the items were assigned with the appropriate scores, the overall mindfulness score was calculated by adding up all the scores. Moreover, the scores of the items within each
subscale were also added separately to get the score for Observe, Describe, Act with Awareness, Non-judge and Non-react subscales.

Scoring for General Self-Efficacy Scale

The self-efficacy scale has a simple method of scoring. The scale has no reverse items and the items were assigned scores simply as follows: Not at all true – 1, Hardly true – 2, Moderately true – 3, Exactly true – 4. Once scores were assigned to each item, the scores were summed up to get the total general self-efficacy score.

Scoring for Connor Davidson Resilience Scale (CD-RISC)

To score the CD-RISC, scores were assigned to items as follows: Not true at all – 0, Rarely True – 1, Sometimes True – 2, Often True – 3, and True nearly all of the time – 4. After each item had been assigned the appropriate score as per the chosen response, the item scores were added together to get the final Resilience Score. This scale also did not have any reverse scoring items.

Once all the scores were obtained, the raw scores were entered on the Excel Sheet and analysed.

RESULTS

The analysis of the collected data was done using the statistical measures of Pearson’s product moment correlation, t-test and descriptive statistical measures such as mean and standard deviation were also used. In order to find the relation between the three constructs correlation was performed between mindfulness and self-efficacy scores, mindfulness and resilience scores and self-efficacy and resilience scores. Correlation helps to understand the relation between two variables by revealing about the strength and direction of the relationship. The measure of the relationship between the two variables is obtained in the form of a correlation coefficient (r) and this coefficient can take up values from -1 to +1. If the value is closer to 1, positive or negative the relation is said to be strong and if it is closer to zero, it indicates a weak correlation. The signs, i.e. positive and negative are markers of direction. If it is a negative relation, then increase in one variable is accompanied by decrease in the other and vice versa while a positive correlation indicates a direct relation (increase in one variable is accompanied by increase in the other and decrease is accompanied by
decrease in other). It is important to note that correlation does not establish causality between the variables; it only gives the strength and direction of relation between them.

To explore if any significant differences exist between the scores of young adults and the elderly with respect to mindfulness, resilience and self-efficacy, t-test was performed. T-test is a statistical procedure that is used to test a hypothesis of no difference between two population means. It is a parametric test that provides a standard score. In this study, independent t-test was used as the null hypotheses that were tested were about the difference between two independent population means, that is, the scores of the different sets of populations were independent of each other.

In case of the current research, both correlation and independent sample t-test (alpha coefficient = 0.05) were computed using Microsoft Excel Analysis ToolPak.

Moreover, the mean and standard deviation of scores on each scale and subscale among males, females and total population were also computed using Excel software.

1. Descriptive statistics

Table 2: Table showing descriptive statistics (Mean, S.D., N = 199)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Scales</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1</td>
<td>Mindfulness F1 Young</td>
<td>25.63</td>
<td>27.16</td>
</tr>
<tr>
<td></td>
<td>Elderly</td>
<td>27</td>
<td>27.82</td>
</tr>
<tr>
<td></td>
<td>Mindfulness F2 Young</td>
<td>25.65</td>
<td>26.22</td>
</tr>
<tr>
<td></td>
<td>Elderly</td>
<td>29.2</td>
<td>26.56</td>
</tr>
<tr>
<td></td>
<td>Mindfulness F3 Young</td>
<td>26.17</td>
<td>27.25</td>
</tr>
<tr>
<td></td>
<td>Elderly</td>
<td>27.87</td>
<td>26.44</td>
</tr>
<tr>
<td></td>
<td>Mindfulness F4 Young</td>
<td>23.28</td>
<td>23.66</td>
</tr>
<tr>
<td></td>
<td>Elderly</td>
<td>22.67</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Mindfulness Young</td>
<td>22.67</td>
<td>21.83</td>
</tr>
</tbody>
</table>
Table 3: Pearson correlation matrix for mindfulness, self-efficacy & resilience

<table>
<thead>
<tr>
<th></th>
<th>Mindfulness</th>
<th>Self-efficacy</th>
<th>Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness</td>
<td>1</td>
<td>0.346*</td>
<td>0.279*</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0.346*</td>
<td>1</td>
<td>0.594*</td>
</tr>
<tr>
<td>Resilience</td>
<td>0.279*</td>
<td>0.594*</td>
<td>1</td>
</tr>
</tbody>
</table>

*statistically significant at 0.01 alpha level of significance

In this table, it can be seen that the correlation between mindfulness and self-efficacy is +0.346 (weak and positive), between mindfulness and resilience is +0.279 (weak and positive) and that between self-efficacy and resilience is +0.594 (moderate and positive). All the values are found to be statistically significant at 0.01 alpha level of significance. The interpretation of this result is done later in the discussion section.

3. **T-test between young adult and elderly population**
Table 4: Table showing t-test scores of mindfulness, resilience and self-efficacy with respect to young and elderly population (N = 199)

<table>
<thead>
<tr>
<th>Scales</th>
<th>Age</th>
<th>Mean</th>
<th>df</th>
<th>N</th>
<th>t-value</th>
<th>Significance (alpha = 0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness</td>
<td>Young</td>
<td>124.26</td>
<td>197</td>
<td>100</td>
<td>1.81</td>
<td>p = 0.03 (difference significant)</td>
</tr>
<tr>
<td></td>
<td>Elderly</td>
<td>128.28</td>
<td></td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Young</td>
<td>30.53</td>
<td>187</td>
<td>100</td>
<td>2.27</td>
<td>p = 0.01 (difference significant)</td>
</tr>
<tr>
<td></td>
<td>Elderly</td>
<td>32.03</td>
<td></td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>Young</td>
<td>68.56</td>
<td>197</td>
<td>100</td>
<td>0.68</td>
<td>p = 0.24 (difference not significant)</td>
</tr>
<tr>
<td></td>
<td>Elderly</td>
<td>69.9</td>
<td></td>
<td>99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table shows the t-values obtained by performing t-test between: a) mindfulness of young and elderly population, b) self-efficacy of young and elderly population and c) resilience of young and elderly population. It can be seen that no significant difference has been found in case of mindfulness and resilience at 0.05 alpha level of significance. However, a significant difference is observed in case of self-efficacy of young and elderly population with the mean of self-efficacy scores of elderly people being greater than the mean of young adults.

DISCUSSION

The current study was aimed at examining the relationship between mindfulness, self-efficacy and resilience and investigating if any differences exist between young adult and elderly people with respect to these constructs. For this, the Five Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer & Toney, 2006), the General Self Efficacy Scale (Schwarzer & Jerusalem, 1995), and the Connor Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003) were administered on a total of 199 people out of which 99 were elderly population and 100 were young adults. To study the relationship between the constructs, correlation method was used. The study further aimed to investigate if any significant differences exist between the young adult and elderly populations with respect to their mindfulness, self-efficacy and resilience. To achieve this objective, t-test method was used. In order to check whether the sample distribution was falling on a normal curve, which is a prerequisite to apply t-test method, the mean and S.D. of the obtained scores were also calculated, as shown in Table 2. It was observed that S.D. was either one-third or
less than one-third of the mean scores and therefore, the criteria was fulfilled and t-test method was applied.

Referring to Table 3, it can be noted that the correlation coefficient values were found to be significant at 0.01 level. The correlation between mindfulness and self-efficacy is found to be 0.346 which is weak but positive correlation. This implies that with increase in mindfulness, the self-efficacy also increases and with increase in self-efficacy, mindfulness also increases. However, the strength of the relationship is somewhat weak meaning that there will not be a tremendous or practically significant increase in mindfulness with increase in self-efficacy and vice versa. This result is supported by a study by Purcell (2017) who found a similar correlation \((r = 0.31)\) between mindfulness and self-efficacy. Keye & Pidgeon (2013) also found a correlation of 0.43 between mindfulness and academic self-efficacy in their study. Moreover, several studies report that with increased mindfulness or with mindfulness training, self-efficacy also increases. Singh (2019) reported that “mindfulness meditation is effective in enhancing self-efficacy of students”. Yet another study by Katan (2018) found significant positive correlation between mindfulness and self-efficacy scores. It is suggested that this positive correlation may exist as with greater levels of mindfulness, an individual may be more aware of their capabilities and relatively free of future anxieties and apprehensions as they have the ability to focus on action ‘in the moment’. Thus, with lesser future-oriented apprehensions, greater awareness of one’s capabilities and a mindful perspective, an individual may develop better belief in their ability to handle tough situations leading to greater self-efficacy. It will however be inappropriate to say based on the result of this study whether any direct causal relationship exist between the two or in which direction. Several prior studies however have established that mindfulness training leads to better mindfulness which in turn leads to increase self-efficacy (Katan, 2018; Sanaei, 2014; Greason & Cashwell, 2009). The relationship, although positive is rather weak. This means that the high levels of one variable does not strongly predict equally high levels of another.

The correlation between mindfulness and resilience is also positive but quite weak. This result is opposed to the results of study by Keye & Pidgeon (2013) where a correlation of 0.67 was observed between the two. The current results suggest that the contribution of resilience in mindfulness and that of mindfulness in resilience of an individual is not so significant in practical terms. There is however, a positive relationship. This may also suggest that the factors underlying mindfulness and the factors responsible for resilience have a lower rate of overlap and are mostly varied. Similar relationship of resilience with emotional
intelligence can also be seen in a study by Choudhary (2019) where she explored a positive significant relationship of resilience with EI. This assumes that aspects of EI or related concept like mindfulness are directly related to resilience. Although this relationship was established for adolescents.

The correlation between self-efficacy and resilience is found to be 0.59. This indicates a positive and moderate correlation. This result supports the study on adolescents done by Caroli & Sagone (2013) who reported a correlation of 0.59 between generalised self-efficacy and resilience. They suggested that “the more the adolescents experienced high levels of resilience, the more they felt themselves able to cope with novelty in various domains”. Schwarzer & Warner (2013) reported that “empirically, general self-efficacy correlates moderately to highly with other components of resilience (Hinz, Schumacher, Albani, Schmid, & Brähler, 2006). Resilience is hence empirically closely related to self-efficacy”. This view is supported by the current study. Being self-efficacious indicates an individual’s readiness and ability to deal with potential future challenges while resilience is the ability to bounce back from or smoothly tackle an adversity that has already befallen the individual. Since both the constructs are concerned with handling difficult or novel situations in life, it is highly possible that the competencies and factors underlying these constructs overlap to a great degree. Thus, the results show moderate to high correlation between the two. A study by Gillespie, Chaboyer, and Wallis, & Grimbeek (2007) also suggested that self-efficacy was a strong predictor of resilience. This is an important finding as the way a person is currently handling their challenges in life may predict the way their readiness to tackle challenges in the future. This can potentially help psychologists to identify people who are likely to break under a tough situation and thus intervene in time and improve their coping abilities and efficacy.

Next table, Table 4 summarises the findings of t-test. It can be seen that in case of mindfulness, the t-score obtained at 0.05 alpha level of significance is 1.81 and the p-value is 0.03 which is less than 0.05 (alpha level of significance). Since p < 0.05, it can be said that the difference in means is statistically significant. Therefore, we reject the null hypothesis and accept the alternate hypothesis. Since t value is positive, it is in the direction of the one tailed hypothesis (Hypothesis 4) that was formulated. Moreover, the mean score on mindfulness test of elderly population is greater than the mean mindfulness score of young adult population. Therefore, we conclude that the mindful ability of elderly population is greater than the mindful ability of young adult population. Studies by Alispahic et al. (2017)
and Shook et al. (2017). Alispahic & Hasanbegovic-Anic conducted a study on mindfulness across different age groups using a Bosnian sample. It was revealed that “older participants' scores were higher than for younger participants for all aspects of mindfulness”. The study by Shook et al. (2017) also reported that older adults reported significantly more positive affect and mindfulness than younger adults. Study by Fountain-Zaragoza et al. (2018) also reported that “Older adults reported higher trait mindfulness and less mind-wandering than young adults”. The reason for a higher mindful ability among older adults may be understood in light of several existing literatures. Carlsten (2006) suggested that “ageing intensifies motivation to savour the present moment in order to derive meaning and satisfaction from life”. Older adults are more likely to spend time thinking and reflecting on the present moment and the past as well as trying to live up their time as best as they can. On the other hand, young adults are often occupied with their apprehensions about future and a busy lifestyle that it is possible that they go through the day without really paying mindful attention to the activities they are performing as their mind is consumed with other thoughts. It is often also observed that elderly people orient themselves more to spirituality as compared to younger adults. A feeling of connection to the divine force may also serve as a factor underlying greater mindfulness. Moreover, emotional control is one important aspect of mindfulness and it has been pointed out that with age the emotional control enhances in individuals (Carlsten, 2000; Charles, 2010). This may be another reason that can potentially justify higher mindfulness scores among the elderly. Prakash et al. (2014) also suggest that with age there is a “preferential change in motivational goals of older adults from ones involving future-oriented wants and desires to present-focused emotion regulation and gratification”. Thus, higher mindfulness among the elderly may be a result of the shift in perspective and desires with age.

In case of self-efficacy, the Table 4 shows the t-score of 2.27. The p-value is 0.01 which again is less than 0.05. Since p < 0.05, the null hypothesis gets rejected and alternatively, alternate hypothesis is accepted. Again, the mean of elderly population is greater than that of young adult population which leads to the retention of the directional alternate hypothesis (Hypothesis 5) that was earlier assumed. Therefore, we conclude that the self-efficacy of elderly population is higher than the self-efficacy of young adults. Review of previous literature mostly highlights that high self-efficacy is a desired construct for healthy ageing. However, it has been found in several studies that the self-efficacy of older adults or elderly is lesser relative to the self-efficacy of young adults. This is often attributed to the reduction
in desire for control (Woodward & Wallston, 1987). Another study by Tripathi & Asthana (2015) found a positive correlation between self-efficacy and mental health and suggested that due to age-related losses, self-efficacy may be reduced in older adults. The results of the current study contradict these findings. Based on the results of the present study, it is suggested that elderly people are higher in self-efficacy than young adults. One possible explanation is that with age, the variety and number of challenges that an individual has faced significantly increases. Thus, one’s belief in handling a novel or difficult task may increase in a direct relation with increase in successful past experiences. It is known that experiential intelligence increases with age; this may be a factor in increasing one’s belief in their ability to overcome a future problem. As per a study by Artistico (2003), it was found that the perceived self-efficacy of older adults increases when the presented problem was related to the context of an old adult as opposed to when it was related to a young adult or was “lacking ecological representativeness”. This result serves as a call for further rigorous research with respect to this research problem so that one can be confident whether age serves as a promoting factor in self-efficacy or otherwise.

For resilience, the t-score at 0.05 alpha level of significance was found out to be 0.68. The p value was found to be 0.24 which is greater than 0.05. Since $p > 0.05$, we accept the null hypothesis and alternatively reject the alternate hypothesis. Despite the mean of elderly population being higher than that of young adults on resilience scale, it is concluded that the obtained difference is not statistically significant at 0.05 alpha level of significance. Therefore, the resilience of elderly and young adult population does not differ significantly and hypothesis 6 stands rejected. A study by Gooding et al. (2012) revealed that “poor perceptions of general health and low energy levels predicted low levels of resilience (among elderly and young adult population) regardless of age”. This suggests that age does not play a crucial role in resilience and there exist separate factors, other than age that have significant influence on the resilience of individuals. Studies on factors underlying resilience, which is the ability to “bounce back from adversity”, have pointed out certain protective factors that are strong predictors of positive psychological functioning following adversity. Broadly, these are individual attributes (such as personality, temperament etc.), relationships (such as parental style, attachment pattern, family cohesion etc.) and external support system (neighbourhood, school etc.) (Garmezy, 1985). Looking at these factors, it may be suggested that age does not have a major role to play when it comes to the factors underlying resilience.
In conclusion, this study suggests that there is a positive correlation between the three constructs- mindfulness, self-efficacy and resilience. The relationship of mindfulness with the two constructs is relatively weak as compared to the correlation between resilience and self-efficacy. Therefore, Hypotheses 1, 2, 3, 4, and 5 gets accepted while Hypothesis 6 gets rejected.

Moreover, the study reveals that self-efficacy and mindfulness is significantly higher in elderly individuals. However, no significant age-related differences were observed in case of resilience. This study therefore culminates with the future implication of further research to identify the factors among the elderly that lead to enhanced self-efficacy and mindful ability. The identification of these will be useful in developing programmes for enhancing these positive traits across elders and potentially other age groups as well. The significant positive correlation between resilience and self-efficacy also opens up new possibilities for enriching resilience and efficaciousness among individuals.

**Conclusion**

With aging, from young adulthood to older adults everyone experiencing different types of physical and psychological challenges in their life. For coping and mitigating these psychological and physical challenges, resilience, mindfulness and self-efficacy played a major role in their life. Unlike, younger adults the high correlation among these positive psychology traits in older adults revealed a new potentials for developing interventions to enhance these positive traits across various age groups. In addition, encourages further research in different domains of cognitive and social challenges faced by different continuum of age groups.

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