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Age and Emotional Intelligence of Healthcare Leaders: A Study

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ABSTRACT: *Healthcare leaders are being challenged to change, adapt with age and improve their approach to effectively lead their Helson, R., & Wink, P. (1987). As a result, many healthcare leaders are not prepared for the current leadership demands of their roles. The use of EI has also been linked to positive results in healthcare settings. As many researchers say that older adults experienced less negative affect than younger adults in work environment their years of experience helps them to control their emotions. Older adults were able to maintain positive moods for longer and negative moods were terminated more quickly than for younger adults. In this study, which is empirical and descriptive in nature, we review evidence suggesting changes in emotional experience across the adult lifespan and then present the relationship of emotional intelligence as measured by the Schuttes Emotional Intelligence Test (SSEIT) and the Multifactor leadership questionnaire (MLQ) and its effect on age. Results are then presented from three cross-sectional samples of adults: Doctor , nurses and paramedicals samples working in minimum 200 bed hospitals in parts of India. In this study, we review theories and evidence suggesting changes in emotional experience across the adult lifespan and then present the relationship of emotional intelligence as measured by the Schuttes Emotional Intelligence Test (SSEIT) and the Multifactor leadership questionnaire (MLQ) and its effect on age. Results are then presented from three cross-sectional samples of adults: doctor, nurses and paramedicals samples working in minimum 200 bed hospitals in parts of India. Comparison of age between below 30 yrs and above 30 yrs is Satisfaction and Emotional intelligence differ significantly between below 30 yrs and above 30 yrs, above 30 yrs have higher Emotional intelligence 124 vs 128 (p=.003). below 30 yrs have same satisfaction level as above 30 yrs median 5vs 5 (p=.019) .Comparison between above 30 years and below 30 years for attributes like transformational and transactional leadership style above 30 years is higher but not very significant. Age effects in the emotional intelligence might also have been attenuated somewhat by the self-report nature of the scale. Older people tend to learn from their experiences .*

KEY WORDS: *Emotional intelligence, Leadership effectiveness, Transformational ,Positive mood*

I. INTRODUCTION:

What is the relationship between emotional intelligence and age? This question has profound implications for organizations as the workforce gets older and increasing emotional demands are made upon leaders. As the healthcare environment continues to gain complexity, the past practices of healthcare leaders may no longer be effective Kegan, R. (1982). Healthcare leaders are being challenged to change, adapt with age and improve their approach to effectively lead their Helson, R., & Wink, P. (1987). As a result, many healthcare leaders are not prepared for the current leadership demands of their roles. The use of EI has also been linked to positive results in healthcare settings. Through using EI, physicians and caregivers are able to recognize and use emotions to facilitate decision-making. EI has been shown to be critical to the delivery of excellent patient care. The authors stated: Traditionally, the terms professionalism or professional behaviors have been used synonymously by educators to imply emotional and social competence. Although there is clear consensus that professional behaviors are important to evaluate, it is also clear that specific performance criteria depending on age for self-awareness, initiative, empathy, conflict management, integrity, team management and other professional behaviors are typically missing from clinical evaluation checklist of many hospitals. Although EI has been shown to contribute to excellent patient care, much less research has been conducted on the links between EI and physician leaders. Older adults face a variety of challenges that might be expected to induce negative affect such as the loss of loved ones, diminished health and unrealized expectations. Yet, paradoxically, the evidence suggests that older people are more able to maintain and even increase subjective well-being than younger people thus experience teaches older people to control their emotions better.. In general, negative affect declines with age while positive affect appears to increase Carstensen, L., Pasupathi, M., Mayr, U, & Nesselroade, J. R. (2000). This paradox has been interpreted as showing that older adults are more adept at self-regulating their emotions through either rearranging their environments or acquiring strategies and capacities to manage their emotions Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselroade,

J. R. (2000).

It might be expected that such strategies and capabilities would be reflected in measures of emotional intelligence that have been proposed to assess how we understand, use and manage emotions.

II. LITERATURE REVIEW:

One of the most systematic studies of emotional experience across the lifespan was conducted by Carstensen et al. (2000). They sampled 184 adults aged from 18 to 94 years across one week using an experience sampling method. Older adults experienced less negative affect than younger adults. Older adults were able to maintain positive moods for longer and negative moods were terminated more quickly than for younger adults. Older adults also experienced more mixed and complex emotions, more frequently experiencing both positive and negative emotions simultaneously. This apparent capacity to more effectively regulate emotions parallels evidence from studies suggesting neuroticism decreases with age (Costa, Herbst, McCrae ,& Siegler, 2000). Socio emotional Selectivity Theory suggests that these changes result from a growing awareness of the limited time that the person has left in their lives (Carstensen et al.,2003 As people realize they have little time left, they are more inclined to focus on immediate positive emotional experience derived from social interactions than to invest in acquiring knowledge and experience to better manage the future. Other studies have demonstrated other ways in which the salience of emotion increases with age. For example, as people grow older they remember emotional material more easily (Carstensen & Tuk-Charles,1994), use more emotional content in their representations of other people (Carstensen & Frederickson ,1998), and make more use of emotions in social problem solving (Blanchard-Fields,1997).

Labouvie-Vief and her colleagues (Labouvie-Vief & Medler, 2002 have proposed that there are two orthogonal aspects of emotional experience during aging: affect optimization and cognitive-affective complexity. Affect optimization involves the capacity to dampen negative affect and enhance and sustain positive affect. Cognitive-affective complexity involves the capacity to coordinate positive and negative emotions in more flexible and differentiated cognitive structures. These cognitive structures allow older adults to differentiate more complex emotions, integrate positive and negative aspects of affective experience as well as deliberately inhibit, evaluate or analyze aspects of their emotional experience and its relationship to their identity. This approach to cognitive-affective complexity refers to the cognitive-affective processes through which emotions are experienced. Increased cognitive-affective complexity allows people to differentiate emotions more effectively, perceive themselves and others in a more flexible, open and tolerant way, recognizing and accepting both negative and positive aspects of themselves and others. Complexity is not simply indexed by the presence or absence of conflicting emotions (Cartensen et al, 2000) but rather by the richness of schemata and cognitive processes for integrating experience with the self and managing emotional experience. With increasing maturity:

" The individual is able to acknowledge conflicting feelings within self and other. Overall, the language of self-regulation becomes more vivid and specific, and less stereotypical. Mature cognitive-emotional complexity thus is evidenced by a language that is complex, non-stereotypical and non-dualistic; that tolerates intra- and inter-individual conflict; and that appreciates the uniqueness of individual experience." (Labouvie Vief et al.,1989:426) .

The literature on ego development is relevant in other ways to the question of emotional change with aging. Loevinger's theory of ego development emphasizes four inter-related domains of development: character development, cognitive style, interpersonal style, and conscious preoccupations (Loevinger,1976;Manners & Durkin ,2001). *Character development* refers to changes in the focus of moral concerns and moral behaviors as well as impulse control. *Cognitive style* refers most particularly to changes in conceptual complexity but is reflected in increasing tolerance of ambiguity and more reflective and objective processing of experience. *Interpersonal style* refers to the orientation and attitudes a person has towards others and relationships with others, particularly with regard to belonging, independence and interdependence. It includes preferences in the type of relationship and understanding of relationships. *Conscious preoccupations* refers to the focus of attention of the persons thoughts and behavior and includes issues such as the extent to which they conform to social rules, take responsibility, and seek and realize independence from others. In short, and emphasizing the affective domain of most interest here, individuals at later stages of ego development have better impulse control, have more complex and integrated cognitive-affective processes, are more likely to respect, tolerate and collaborate with others, and are more likely to be able to differentiate, communicate and use emotions in their thinking and problem solving. Manners and Durkin (2001:543) summarise this developmental trajectory as follows: "Each sequential stage represents a restructuring of the self-system toward greater self and interpersonal awareness, conceptual complexity, flexibility, personal autonomy, and responsibility."

The development of a positive identity, or core self, appears to be critical for integrating negative affect and maintaining resiliency. Labouvie-Vief and Medler (2002) distinguished between 4 possible combinations of affect optimization and cognitive-affective complexity: integrated (high optimization, high complexity), complex (low optimization, high complexity), defended (high optimization, low complexity) and dysregulated (low optimization, low complexity). They found evidence that older adults tended to be more integrated or defended than younger adults. In other words, aging was consistently associated with increasing affect optimization while cognitive-affective complexity peaked in mid-life and then, for some people at least, declined in later life perhaps as a result of declining cognitive resources Labouvie-Vief and Medler (2002). This result reflects the finding that older adults exhibit decreasing openness to experience (Costa et al., 2000).
However, it is worthwhile noting that age effects in the studies mentioned above were usually very small. For example, Labouvie-Vief et al(1989) reported a significant effect of age on levels of emotional understanding after controlling for ego development. However, this effect disappeared when the 10-18 year old groups were excluded from the analysis and only adults were considered. The authors concluded that affective "development in adulthood is not best indexed by age Labouvie-Vief and Medler (2002) also showed no effect of age on cognitive-affective complexity after controlling for education, SES and relationship quality, although they did demonstrate a significant relationship between age and affective optimization. Carstensen et al (2000) reported a nonsignificant correlation of .07 between age and positive emotion. This was comparable to the significant correlation of .10 in a much larger sample reported by Mroczek and Kolarz (1998) Thus the relationship between age and emotional variables are has been modest even in studies that relied upon the collection of much more extensive and detailed data than the self-report measure.

Research Design: Research design is descriptive and analytical. In this study, we review theories and evidence suggesting changes in emotional experience across the adult lifespan and then present the relationship of emotional intelligence as measured by the Schuttes Emotional Intelligence Test (SSEIT) and the Multifactor leadership questionnaire (MLQ) and its effect on age. Results are then presented from three cross-sectional samples of adults: Doctors, nurses and paramedicals samples working in minimum 200 bed hospitals in parts of India.

Nature of Research: This research-work is empirical in nature as conclusions have been drawn by carefully collecting relevant data and analyzing the same.

Statement of the Problem: The purpose of this study is to investigate the relationship between emotional intelligence, leadership style and leadership effectiveness. The problem is the recognition that while a significant amount of research on leadership exists (Stogdill, 1974; Yukl, 1998; Yukl & VanFleet, 1992), the emotional intelligence research is comparatively thin and the relationship between leadership and emotional intelligence is smaller yet.

Sample Size: Confidence limit 95%; margin of error 5%.The respondents had an average age of 28 years, and an average work experience of 5 years, holding their current position for 2-3 years on an average. The questionnaire was distributed in separate sets assuring participant of complete confidentiality.

Research question: Investigate whether the total emotional intelligence score and leadership score will be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{OA}: The total emotional intelligence score will be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{aA}: The total emotional intelligence score will not be significantly same or higher for age below 30 years than for age above 30years of health care professionals.
H_{OB}: The transformational leadership score will be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{aB}: The transformational leadership score will not be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{OC}: The transactional leadership score will be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{aC}: The transactional leadership score will not be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{od} : The Laissez -Faire leadership score will be significantly same or higher for age above 30 years than for age below 30years of health care professionals.

H_{ad} : The Laissez -Faire leadership score will not be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{oe} : The extra effort leadership score will be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{ae} : The extra effort leadership score will not be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{of} : The effectiveness leadership score will be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{af} : The effectiveness leadership score will not be significantly same or higher for age above 30 years than for age below 30years of health care professionals.
H_{og} : The satisfaction leadership score will be significantly same or higher for age above 30 years than for age below 30years of health care professionals**.**
H_{a7g} : The satisfaction leadership score will not be significantly same or higher for age above 30 years than for age below 30years of health care professionals.

Statistical Analysis
Statistical analysis of the data was carried out using the SPSS statistical package version 20.Descriptive statistics and inferential statistics were calculated and are reported on in the results section below. The descriptive statistics are intended to present a snapshot of the data while the Spearman's Rho was used to evaluate the relationships between Emotional Intelligence, and Leadership effectiveness.

Table 1- Spearman's rho correlation :

	Overall	Medical Professionals			Locality			Age	
		Doctor	Nurse	Paramedical	Bangalore	Kolkata	Gangtok	Below 30years	Above 30years
Idealized Influence (A)	0.255**	0.180	0.240	0.407	0.141	0.321	0.380	0.272	0.228
Idealized Influence (B)	0.300**	0.404	0.254	0.203	0.158	0.353	0.506	0.330	0.305
Inspirational Motivation	0.317**	0.419	0.196	0.368	0.362	0.166	0.429	0.228	0.448
Intellectual Stimulation	0.142**	0.189	0.078	0.134	0.085	0.180	0.199	0.083	0.240
Individual Consideration	0.133*	0.073	-0.030	0.354	0.062	0.177	0.288	0.057	0.232
Transformational Leadership	0.310**	0.312	0.238	0.409	0.214	0.308	0.471	0.286	0.350
Contingent Reward	0.212**	0.216	0.185	0.275	0.240	0.093	0.299	0.138	0.349
Mgmt by Exception (Active)	0.043	0.082	-0.118	0.143	-0.037	0.117	0.185	-0.055	0.227
Mgmt by Exception (Passive)	-0.036	0.169	-0.110	-0.261	-0.022	-0.037	-0.004	-0.047	-0.020
Transactional	0.123*	0.292	-0.017	0.059	0.094	0.040	0.279	0.021	0.314
Laissez -Faire	-0.102	-0.016	-0.075	-0.297	-0.100	-0.038	-0.132	-0.074	-0.120
Extra Effort	0.096	0.035	0.002	0.285	0.133	-0.029	0.164	0.484	0.181
Effectiveness	0.273**	0.261	0.229	0.375	0.302	0.244	0.247	0.324	0.216
Satisfaction	0.089	0.060	0.187	0.255	0.056	-0.012	0.303	0.048	-0.040

Reliability – leadership N of Items = 45 Alpha = 0.8106
Reliability – EI N of Items =33 Alpha = 0.8539

III. RESULTS:

Spearman's correlation was done to examine the relationship between the domains of leadership and Emotional intelligence for age below 30years showed Idealized Influence (A) (r=0.272), Idealized Information (B) (r=0.330), Inspirational Motivation (r=0.228), Transformational Leadership (r=0.286), Contingent Reward (r=0.212), Effectiveness (r=0.324), where as Management by Exception (active) (r=0.043), Management by Exception (passive) (r=0.047), Transactional (r=0.021), Laissez Faire (r=0.102), Extra Effort (r=0.096), Satisfaction(r=0.089) are not significant age above 30years showed results Idealized Influence (A) (r=0.228),

Idealized Influence (B) (r=0.305), Inspirational Motivation (r=0.448), Intellectual Stimulation (r=0.240), Individual Consideration(r=0.232), Transformational Leadership (r=0.350), Contingent Reward (r=0.349), Management by Exception (active) (r=0.227), Transactional (r=0.314), Extra Effort (r=0.181), Effectiveness (r=0.216).Spearman's correlation was done to examine the relationship between the domains of leadership and Emotional intelligence in medical professionals .

In **Doctors** group the results indicated that some of the domain that were correlated with Emotional intelligence. There was a positive correlation between Emotional intelligence and Idealized Influence (A) (r=0.180) and Idealized Influence (B) (r=0.404), Inspirational motivation (0.419), Intellectual Stimulation (r=0.189), Individual Consideration (r=0.073), Transformational Leadership (r=0.312), Contingent Reward (r=0.216), Transactional (r=0.292).

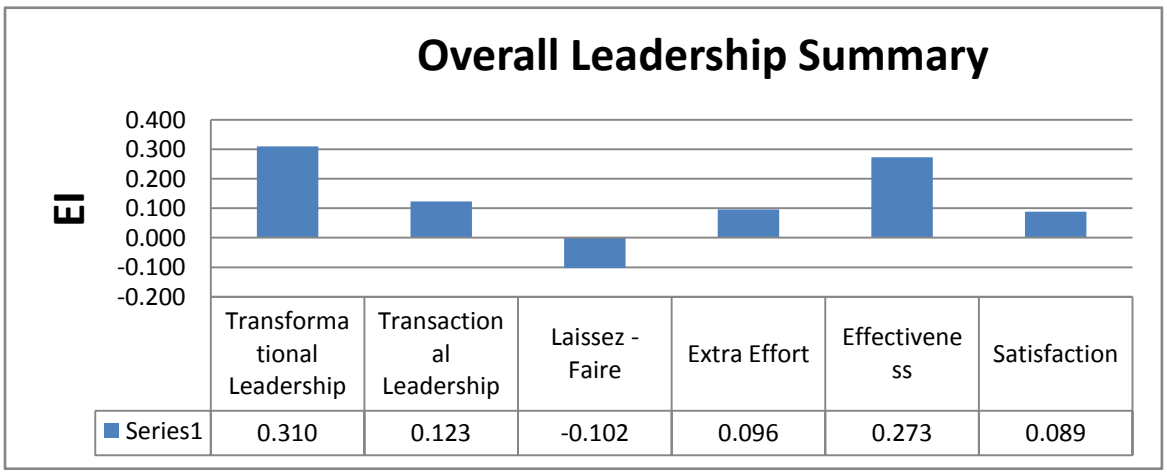
For **Nurses** group the results indicated that some of the domain that were correlated with Emotional intelligence. There was a positive correlation between Emotional intelligence and Idealized Influence (A) (r=0.240) and Idealized Influence (B) (r=0.254), Inspirational Motivation (r=0.196), Transformational Leadership (r=0.238), Effectiveness (r=0.229).

For **Paramedical** group the results indicated that some of the domain that were correlated with Emotional intelligence. There was a positive correlation between Emotional intelligence and Idealized Influence (A) (r=0.407) and Idealized Influence (B) (r=0.203), Inspirational Motivation(r=0.368), Individual Consideration (r=0.354), Transformational Leadership (r=0.409), Contingent Reward (r=0.275), Laissez Faire (r=0.297), Extra Effort (r=0.285), Effectiveness (r=0.375), Satisfaction (r=0.255).

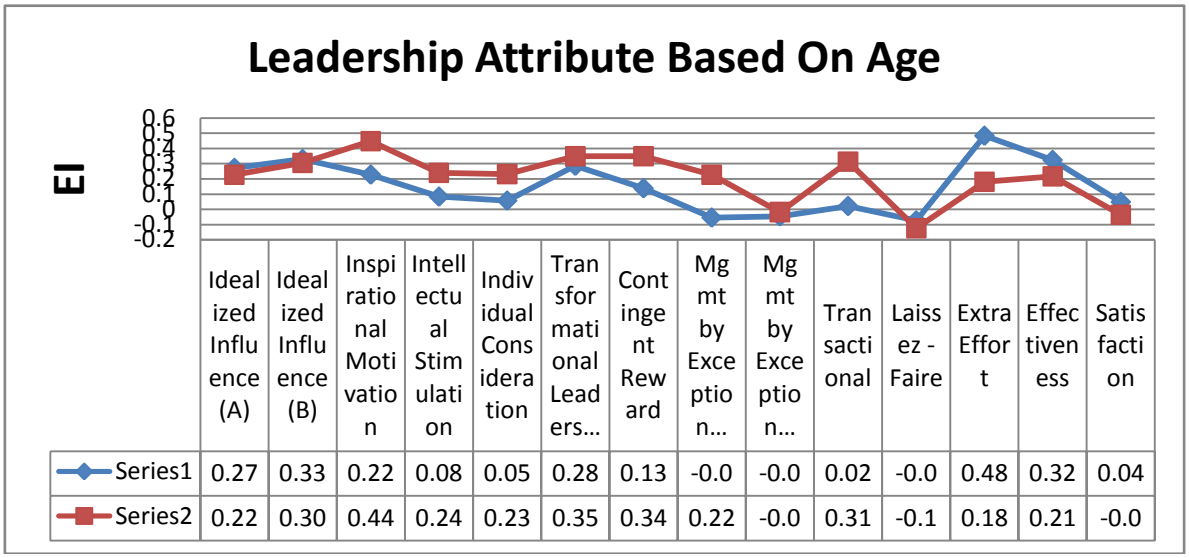
Spearman's Correlation was done to examine the relationship between domain of leadership and Emotional Intelligence on Locality-Bangalore results showed Inspirational Motivation (r=0.362), Transformational Leadership (r=0.214), Contingent Reward (r=0.240), Effectiveness (r=0.302).

In Locality Kolkata results showed Idealized Influence (A) (r=0.321), Idealized Influence (B) (r=0.353), Transformational Leadership (r=0.308), Effectiveness (r=0.244).

In Locality Gangtok results showed Idealized Influence (A) (r=0.380), Individual consideration (r=0.288), Transformational Leadership (r=0.471), contingent Reward (r=0.299).



AGE	Below 30 years	Above 30 years
Idealized Influence (A)	0.272	0.228
Idealized Influence (B)	0.330	0.305
Inspirational Motivation	0.228	0.448
Intellectual Stimulation	0.083	0.240
Individual Consideration	0.057	0.232
Transformational Leadership	0.286	0.350
Contingent Reward	0.138	0.349
Mgmt by Exception (Active)	-0.055	0.227
Mgmt by Exception (Passive)	-0.047	-0.018
Transactional	0.021	0.314
Laissez -Faire	-0.074	-0.124
Extra Effort	0.484	0.181
Effectiveness	0.324	0.216
Satisfaction	0.048	-0.036

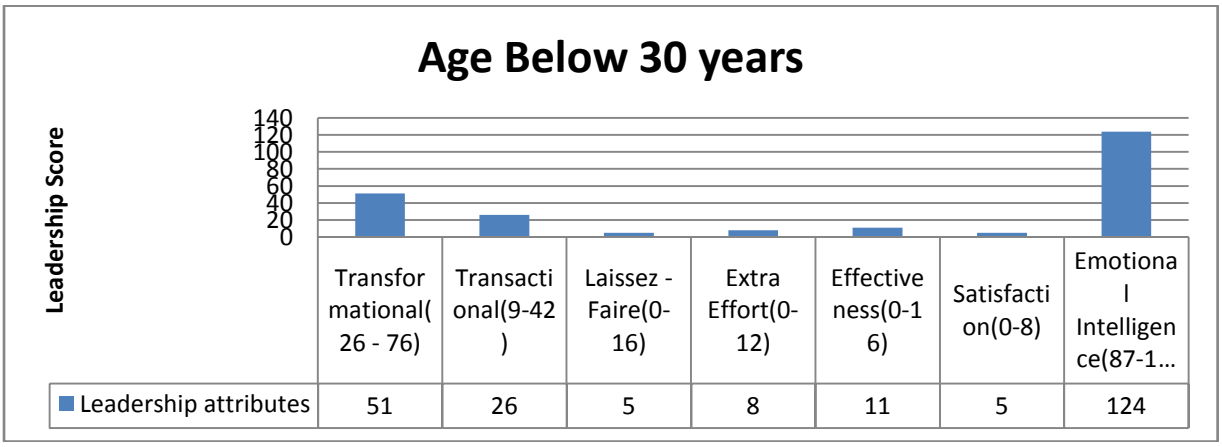


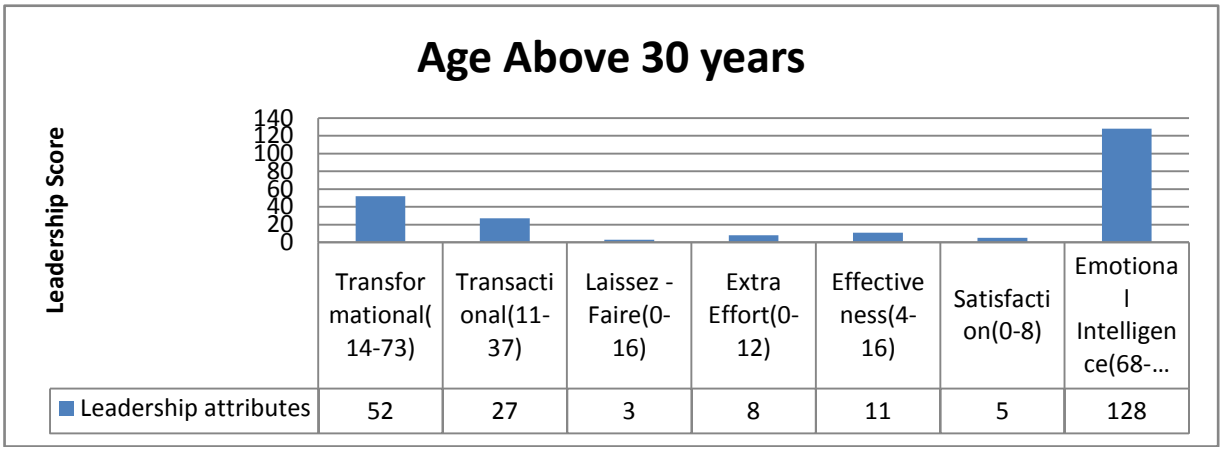
Red =Above 30 years and Blue = Below 30 years.

Comparison- Employing Mann and Whitney Test

Age		Below 30 years	Above 30 years	
		Median (Interquartile Range))	**Median (Interquartile Range)**	**Outcome of Statistical Analysis***
Leadership attributes	**Transformational**	51 (26 - 76)	5 2 (14-73)	U=12266.00 P=0.579
	Transactional	26 (9-42)	27 (11-37)	U=12366.500 P=0.664
	Laissez -Faire	5 (0-16)	3(0-16)	U=10802.500 P=0.020
	Extra Effort	8 (0-12)	8 (0-12)	U=12619.500 P=0.894
	Effectiveness	11 (0-16)	11 (4-16)	U=12223.500 P=0.543
	Satisfaction	**5 (0-8)**	**5 (0-8)**	U=10791.000 P=0.019
Emotional Intelligence	**Overall Score**	124 (87-155)	**128 (68-154)**	U=10281.500 P=0.003

* Employing Mann and Whitney Test for independent samples





IV. RESULTS:

Comparison of age between below 30 yrs and above 30 yrs is Satisfaction and Emotional intelligence differ significantly between below 30 yrs and above 30 yrs, above 30 yrs have higher Emotional intelligence 124 vs 128 (p=.003). below 30 yrs have same satisfaction level as above 30 yrs median 5vs 5 (p=.019) .Comparison between above 30 years and below 30 years for attributes like transformational and transactional leadership style above 30 years is higher but not very significant.

Age effects in the emotional intelligence might also have been attenuated somewhat by the self-report nature of the scale. Older people tend to learn from their experiences .As discussed above, there is evidence that older adults pay more attention to, and remember more emotional material (Carstensen et al 2000) point out that global self-report measures evaluating one's own performance are going to be highly cognitive, involve comparisons with the past and present and involve idiosyncratic standards. It is possible that older adults adopt higher standards for judging the success of their attempts to control emotions or even for what is considered to be a difficult situation. If, for example, older adults have higher expectations of themselves with regard to emotional control, then they might be more likely to report a higher frequency of being unable to control their strong emotions adequately In terms of further research, there is a need to explore the finding that older, female medical professionals were more likely to control their emotions than younger or male medical professionals to self-report using emotions in decision-making, problem-solving and memory. Further research is also required regarding the significant decline in emotional control found across the lifespan in the largest sample in this study. Given the strength of the literature arguing for increases in emotional control, it seems most likely that this result arose from memory and emotional salience effects associated with the way in which items within a self-report measure of emotional intelligence are construed.

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