

Social Intelligence as a Predictor of Positive Psychological Health

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The construct of Positive Health provides a comprehensive operationalization of one's satisfaction with life, happiness and optimism. The current study examined the relationship between Positive Psychological health and Social intelligence (SI) in a sample of 300 working adults (male=170 and female=130). Positive health was assessed by (a) 29 -Oxford Happiness Scale, (b) Satisfaction with Life Scale and (c) Life Orientation test-revised. Social intelligence (SI) was assessed by a Social Intelligence Scale which provides scores on eight dimensions i.e. patience, cooperativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humor, and memory. Correlation analysis showed significant positive association between the two components of Positive Psychological Health i.e. satisfaction with life and happiness, and six factors of Social intelligence (Cooperativeness, Confidence, Sensitivity, tactfulness Sense of humor, and memory). Optimism was found to be significantly and positively correlated with patience, cooperativeness, confidence and tactfulness and negatively correlated with memory. Further Step-wise regression analysis revealed that out of eight, seven factors of Social intelligence significantly predict one or the other Positive Health dimensions.

Keywords: Social intelligence, Life Orientation, and Positive Health

Today most of the health professionals would agree that health involves much more than simply absence of disease. It is quite possible for a person to be free of disease but still not enjoy a vigorous satisfying life. Researches have shown that psychology for throughout its history has focused more on negative emotions, but eliminating excess negatives does not produce happiness, it produces emptiness (Lewis, 2006). Even the great historian of medicine, Sigerist (1941) defined health in positive terms, "Health is ... not simply the absence of disease: it is something positive, a joyful attitude toward life, and a cheerful acceptance of responsibilities that life put upon the individual." This statement tries to establish health as a state that can

be described conceptually at least, in positive terms, not merely as absence of negative elements.

Thus, Positive health can be embodied as building up of positive behaviour / experiences which provide a buffer against/ or prevents illness and help the individual not only to endure and survive, but flourish. The positive, subjective experiences are associated with past (well-being, contentment and satisfaction), present (happiness and flow), and future (optimism and hope).

Satisfaction is a state of mind. It evaluates appraisal of something. Life satisfaction is the degree to which a person positively examines the overall quality of his/her life as a whole. In other words, it is how

much the person likes the life he/she leads. On the other hand, happiness is a positive psychological state characterized by high level of positive affect and a low level of negative affect (Carr, 2004). Optimism is expectation of good things and explaining things positively. The two main approaches to optimism are based on distinct conceptualization of optimism. At one extreme, optimism has been conceptualized as a broad personality trait characterized by general optimistic expectations (Scheier & Carver, 1985) while at the other it has been constructed as an explanatory style (Seligman, 1998). The dispositional optimism is individual's stable generalized expectation that they will experience good things in life. Scheier and Carver (1985) defined dispositional optimism as stable tendency to "believe that good rather than bad things will happen."

But it has been observed that people differ from each other on their health status. There are various groups of factors which may determine and influence the health and one such group of factors that significantly affect Positive Psychological Health is of the individual differences. Individuals differ not only in their physical characteristics but also in their psychological make up such as personality, memory, intelligence. Among these factors intelligence may be associated with Positive Psychological Health and other health related behaviours. There are some contradictory results regarding associations between level of intelligence and health status of a person. As we all are social beings, therefore social intelligence may be related to health.

As originally coined by Thorndike (1920), the term referred to the persons ability to understand and manage other people and to engage in adaptive social interactions. Similarly, Moss and Hunt (1927) defined social intelligence as the "ability to get along with others". Vernon (1933) provided the

most wide-ranging definition of social intelligence as the person's "ability to get along with people in general, social technique or ease in society, knowledge of social matters, susceptibility to stimuli from other members of a group, as well as insight into the temporary moods or underlying personality traits of strangers." More recently, Cantor and Kihlstrom (1987) redefined social intelligence as the individual's fund of knowledge about the social world.

Guilford's (1967) structure of Intellect model postulated a system of 120 separate intellectual abilities based on all possible combinations of operations (cognition, memory, divergent production, convergent production and evaluation), with four categories of content (figural, symbolic, semantic, and behavioural) and six categories of products (units, classes, relations, system, transformations and implications). The behavioural domain corresponds to social intelligence. Social intelligence is represented as 30 abilities lying in the domain of behavioural operations.

According to Gardner's (1983) theory of multiple intelligences, intelligence is not a unitary cognitive ability but that there are seven (and perhaps more) quite different kinds of intelligence. Two are explicitly personal and social in nature i.e. intrapersonal and interpersonal. Gardner defines interpersonal intelligence as the individual's ability to notice and make distinctions among other individuals. However, social intelligence is also explicitly represented in Sternberg's triarchic view of intelligence (Sternberg, 1984, 1985). According to the triarchic theory, intelligence is composed of analytical, creative and practical abilities. Practical intelligence is defined in terms of problem solving in everyday contexts and explicitly includes social intelligence (Sternberg & Wagner, 1986).

Bar-On (2005) talked of emotional-social intelligence, according to him, which is composed of a number of intrapersonal and interpersonal competencies, skills and facilitators that combine to determine effective human behavior. Researchers have examined the ability of intrapersonal and interpersonal competencies, skills and facilitators in influencing one's performance, physical health, psychological health, self-actualization and subjective well-being (Bar-On, 2005, 2004, 2003, 2001, 1997; Bar-On, Handley & Fund, 2005; Krivoy, Weyl Ben-Arush, & Bar-On, 2000). Thus, the major objective of the study was to examine the relation between Positive Psychological Health (happiness, satisfaction With Life and optimism) and Social intelligence.

Method

Sample:

For the purpose of the present investigation a correlational design was used. A sample of 300 working adults (males=170 and females=130) was selected from Chandigarh, Delhi and different cities of Haryana (Rohtak, Bhiwani, Faridabad and Hissar), on the basis of non-random sampling procedure. The selected sample consisted of educated respondents from various professions. The age range of the sample was 20 to 60 years. It was especially ascertained that the respondents had not undergone any major and significant life change during the preceding two months.

Tools:

Social Intelligence scale: To measure the construct of SI, Social Intelligence scale developed by Chadha and Ganeshan (1986) was used. The scale consists of 66 items covering 8 dimensions of Social Intelligence. The 8 dimensions of Social Intelligence are patience, cooperativeness, confidence, sensitivity, recognition of social environment, tactfulness sense of humor, and memory. Chadha and Ganeshan (1986) reported that

their scale had test-retest correlation coefficients, for each dimension, ranged from 0.89 to 0.96 and the split half correlation coefficients ranged from 0.84 to 0.97. In order to determine the validity of the test the coefficient of correlations were computed between scores of the SIS and social intelligence test by Moss, Hunt, Omwake and Woodward (1955). The product moment correlation was found to be 0.70 (in case of total score). The correlation indicated the criteria validity of the scale.

29-Revised Oxford Happiness Scale (Argyle 2001). It was used to measure Happiness. The scale contains 29 items or group of statements about personal happiness. Each group has four response statements (a, b, c & d) and the subject is asked to pick out the one statement that best describes the way he /she was feeling. The scoring weights were 0,1,2,3 for a, b, c and d statements respectively.

Satisfaction with Life Scale: It was used to assess the life satisfaction of the subjects. The scale has been originally developed by Diener, Emmons, Larsen & Griffin, 1985. This scale contains five items requiring a general evaluation of the respondents life as a whole on a 7-point scale ranging from strongly disagree to strongly agree. So, the total score may range from 5 to 35. Diener, Emmons, Larson and Griffin (1985) reported that their scale has a test-retest correlation coefficient of 0.82 (over a period of two months) and a coefficient alpha of 0.87.

Life Orientation Test- Revised (LOT-R): To assess the degree of optimism of the subject, Life orientation test-revised (Scheier, Carver, & Bridges, 1994) was used. Using a 5-point likert-type scale the respondents are required to indicate the extent of their agreement with which item using the following response format: strongly agree to strong disagree. The LOT-R is a

short instrument consisting of 10 items, of which 6 items (3 items are positive and 3 items are negative) are scored for overall optimism score and the remaining 4 items are filler items and are ignored for the purpose of calculating the individual score. For the present study only 6 items were used, ignoring filler items. All the items were scored 5-4-3-2-1 for strongly agree-agree-unsure-disagree-strongly disagree, except items, 2, 4 and 5 which are scored in the reversed direction. Scheier, Carver, and Bridges (1994) reported sound convergent and discriminant validity for the LOT-R. They also reported that item-scale correlations in respect of internal consistency ranged from 0.43 to 0.63.

Procedure:

The Social intelligence scale, 29- Revised Oxford Happiness Scale, Satisfaction with Life Scale, and Life Orientation Test- Revised were administered individually as per respective instructions to all the 300 working educated adults. The sequence of the administration of the tools was randomized in every case, in order to minimize the effect of fatigue.

Results and Discussion

The coefficients of correlations were computed to study associations between the 8 factors of social intelligence and measure of positive health and the same have been shown in table 1. The result reveals that except for the association with optimism ($r = .30$, $p < .01$) factor A i.e Patience is not significantly related to any of the other positive psychological health measures, neither with Happiness nor with Satisfaction with life. This implies that a person with patience is more likely to have a global expectation that more good things than bad would happen in the future. As such people patiently pursue their goals, regulate themselves and their personal states using effective strategies, so they are likely to achieve their goals in future.

Table 1 Coefficient of correlations between Social Intelligence factors and Positive Health components

Social Intelligence Factors	Happiness		
Satisfaction with Life	Life Orientation	Test-R	
(A) SI-Patience	.07	.08	.30**
(B) SI-cooperativeness	.12*	.22**	.17**
(C) SI-confidence	.15**	.19**	.36**
(D) SI-Sensitivity	.25**	.15**	.10
(E) SI-Recognition of social env.	-.05	-.04	.06
(F) SI-Tactfulness	.19**	.31**	.23**
(G) SI-Sense of humor	.19**	.14*	.08
(H) SI-Memory	.21**	.38**	-.11*

** $p < .01$, * $p < .05$

Factor B, Co-operativeness was found to be positively and significantly correlated with Happiness ($r = .12$, $p < .05$), Satisfaction with life ($r = .22$, $p < .01$), and Optimism ($r = .17$, $p < .01$). The results imply that a cooperative individual is happy, satisfied with life and optimistic. This may be because, cooperative people have helping nature, interact with others in pleasant way, view situations from all angles and are considerative of others feelings, which in turn may promotes feeling of happiness, satisfaction, optimism. These findings are supported by Axelrod (1984) who observed that co-operation with acquaintances is a potential source of happiness. Buss (2000) also reported that co-operation is not only a way to increase happiness but also a way to avoid unhappiness due to regular involvement in competition.

The factor C, Confidence, deals with the ability to develop firm trust in oneself and ones chances. The significant positive coefficients of correlations obtained between confidence and positive psychological health measures i.e. Happiness ($r = .15$, $p < .01$), Satisfaction with life ($r = .19$, $p < .01$), and Optimism ($r = .36$, $p < .01$) were indicative of the view that these two are very closely associated with each other. Thus, individuals

with high level of confidence are more optimistic about their future, are happy and more satisfied with life.

The factor D of social intelligence is Sensitivity was found to be significantly and positively correlated with Happiness ($r = .25$, $p < .01$), and Satisfaction with life ($r = .15$, $p < .01$) and not with Optimism ($r = .10$, $p < .05$). Thus, it implies that people, who perceive and understand feelings of others, compassionately help people in need and make a difference in their lives at times creates situation which promotes a feeling of happiness and a sense of satisfaction with life.

Recognition of social environment, factor E, of social intelligence measures ability to perceive the nature and atmosphere of the existing situation. Surprisingly this factor did not correlate significantly with any of the measures of positive psychological health. Where as results indicated that factor F, Tactfulness, of social intelligence scale was found to be significantly and positively correlated with all the measures of positive psychological health i.e. Happiness ($r = .19$, $p < .01$), Satisfaction with life ($r = .31$, $p < .01$) and Optimism ($r = .23$, $p < .01$). It is inferred from the results that tactful people, who have delicate perception of the right things to say or do, are happy with their present, satisfied with their life and are optimistic about positive things to happen in future.

Sense of humor, factor G of social intelligence, is positively and significantly correlated with Happiness ($r = .19$, $p < .01$), and Satisfaction with life ($r = .14$, $p < .01$) whereas, a non-significant correlation was obtained between factor G and Optimism. This implies that individuals with sense of humor, having ability to appreciate things, situations or people that are comic, possess good general mental health, are happy, have fun, and are more satisfied with their life. In an extensive series of studies, humor has been reported as an effective coping strategy

(LefCourt, 2001, 2002).

Factor H of social intelligence i.e. memory was significantly and positively correlated with Happiness ($r = .21$, $p < .01$) and Satisfaction with life ($r = .38$, $p < .01$) and negatively correlated ($r = .11$, $p < .05$) with Optimism. This implies that individuals who possess good memory are happier and more satisfied with their life. But such individuals are not optimistic about their future. This may be due to their good memory for the past issues and experiences that are unpleasant then it is quite possible that memories of those unfavorable experiences hinder in being optimistic.

A general glance at the inter correlation table reveals that out of eight, 4 social intelligence factors B, C, F, H (cooperativeness, confidence, tactfulness, and memory) were significantly related to all the measure of positive psychological health. Social intelligence factors D and G (sensitivity and sense of humor) were significantly related to Happiness and Satisfaction with life. Factor A, patience was significantly related to only one component of positive psychological health i.e. optimism. Whereas, factor E, recognition of social environment was not found to be significantly related with any of the positive health dimensions.

Although correlations are very useful statistical tool to know the associations yet they provide no idea about the predictive power of the variable. Therefore, multiple regression was worked out by using stepwise method to find a sub set of social intelligence factors that account maximum proportion of variance in Positive Psychological Health and to eliminate those that do not make additional contribution to the variables already in the equation. In the present study, there were a total of 8 predictor variables (Social intelligence factors) and 3 criterion variables (Happiness, Satisfaction with life and Optimism). Multiple regression was applied on each criterion variable and results are

depicted in Table 2.

The results of regression analysis on Happiness scores point out three predictors that met the criteria to entry in the equation (Table-2). Social intelligence factor, Sensitivity, contributed maximum to the prediction of Happiness. The Multiple R for this predictor is .25 and $R^2 = .06$ ($F = 19.85$, $p < .01$), which means that Sensitivity accounted for 6% of variance in the criterion variable i.e. Happiness. At the second step, SI (memory) entered with multiple $R = .30$ and $R^2 = .09$ ($F = 14.97$, $p < .01$) and R^2 -change = .03. This implies that SI (memory) explains

9% variance in the criterion variable jointly with Sensitivity and if considered alone accounts for only 3% of variance. SI (Sense of Humor) entered the regression equation at third step, increasing Multiple R to .33. The R^2 is equal to .11 ($F = 12.18$, $p < .01$) and R^2 -change was .02. These results indicate that SI (Sense of Humor) account for 11% of variance together with SI (Sensitivity) and SI (memory) and only 2% of variance, when taken alone. The regression coefficients 'B' of SI (Sensitivity) SI (memory) and SI (sense of humor) pointed towards the positive direction of influence for all the predictors.

Table 2 Predictors of positive psychological health computed by step-wise multiple regression

Predictors	Multiple R	R Square	R Sq Change	B
HAPPINESS				
SI-Sensitivity	.25	.06	1.48	19.85**
SI-Memory	.30	.09	1.71	14.97**
SI-Sense of humor	.33	.11	1.42	12.18**
SATISFACTION WITH LIFE				
SI-Memory	.38	.14	1.37	49.71**
SI-Tactfulness	.46	.21	1.08	40.19**
SI-Recognition of social env.	.48	.23	-.89	30.06**
SI-confidence	.50	.24	.34	23.79**
OPTIMISM				
SI-confidence	.36	.13	.59	42.92**
SI-Patience	.42	.18	.27	31.41**
SI-Memory	.46	.21	-.34	25.75**

** $p < .01$

The regression equation was computed to estimate the extent of variance in satisfaction with life scale scores. The most significant predictor of satisfaction with life was found to be SI (memory) having Multiple R equal to .38 and $R^2 = .14$ ($F = 49.71$, $p < .01$). This implies that 14% of variance in the outcome variable i.e. satisfaction with life is explained via SI (memory). At the step two, SI (tactfulness) entered the regression equation and increased multiple R to .46. The $R^2 = .21$ ($F = 40.19$, $p < .01$) and R^2 -change=.07, explains that 21% of variance in satisfaction with life is accounted by the

combination of SI (memory) and SI (tactfulness). However, SI (tactfulness) alone account for 7% of variance in the outcome or criterion variable. At the next step in regression equation, SI (Recognition of social environment) entered with raising the multiple R equal to .48 and R^2 equal to .23 ($F = 30.06$, $p < .01$). This implies that SI (Recognition of social environment) together with other predictors explains 23% of variance in the criterion variable, whereas at its own level it contributes only 2%. At the fourth and last step, SI (Confidence level) entered the regression equation increasing multiple R to

.50. R^2 equal to .24 ($F = 23.79$, $p < .01$) and R^2 -change equal to .01, indicates that SI (Confidence level) account for 24% variance in satisfaction with life together with other predictors and only 1% of variance is accounted by SI (Confidence level) alone. The regression coefficients 'B' of SI (memory), SI (tactfulness), SI (recognition of social environment) and SI (Confidence level) indicate that the direction of influence was positive except for SI (recognition of social environment) where it is negative.

The regression analysis on life orientation (optimism) scores revealed that out of 8 predictor variables only three met the criteria. Table 2 reveals that the most significant predictor of optimism was found to be SI (confidence), Multiple R equal to .36 and the R^2 equal to .13 ($F = 42.92$, $p < .01$) tells that this predictor variable accounts for 13% of variance in the criterion variable i.e. optimism. At the next step in regression equation, SI (patience) entered the equation increasing the multiple R value to .42. The R^2 was found to be equal to .18 ($F = 31.41$, $p < .01$) It implies that 18% of variance in optimism is explained by SI (patience) in combination with SI (confidence). Whereas the individual share of variance for this variable is 5%. At third step, SI (memory) entered the regression equation increasing multiple R to .46 and R^2 equal to .21 ($F = 25.75$, $p < .01$), which implies that SI (memory) with combination of above two predictors account for 21% of variance in optimism. It further implies that only 3% (R^2 -change=.03) of variance is explained by SI (memory) alone. The regression coefficients 'B' of SI (confidence), SI (patience) and SI (memory) indicated that direction of influence was positive for the two predictors except SI (memory) where the direction of contribution is negative.

Results based on step-wise multiple regression suggest that memory is the most common predictor of psychological health. It may be inferred that good memory is the

positive source of happiness as well as satisfaction with life. From the above discussion it can be inferred that various factors of Social Intelligence significantly predict different components of Positive Psychological Health. Thus, individuals with high level of social intelligence possess positive psychological health. So, one can enhance one's positive health by improving social intelligence. Therefore, further researches may be undertaken for designing possible intervention to enhance Social Intelligence and in turn improve Psychological Health.

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Received: August 10, 2008

Revision received: August 31, 2008

Accepted: December 01, 2008

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