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Trait gratitude as predictor of psychological well-being among late adolescents

Hira Naeem, Attiya Inam, Farooq Sher

Department of Human Development and Family Studies, University of Home Economics, Lahore and Faculty of Engineering, Environment and Computing, Coventry University, Coventry, UK

Objective: To investigate the levels of various dimensions of trait gratitude and psychological well-being (PWB) among late adolescents; the correlation between dimensions of trait gratitude and PWB and predictive power of gratitude with PWB after controlling demographic characteristics.

Methodology: Probability random sampling was used to collect cross-sectional data from 378 late adolescents (18-20 years old) enrolled from various educational institutes of Lahore, Pakistan.

Results: Majority of late adolescents (82%;

93.9%) reported moderate levels of trait gratitude and PWB, respectively. Significant relationship among variables was also found ($r = .469$). Trait gratitude explained additional 28.6% of the variance in PWB, after controlling age and gender ($\Delta R^2 = 0.286$).

Conclusion: Individuals' mental health is related to gratitude, making it an essential trait among individual especially in adolescence. (Rawal Med J 202;46:155-158).

Keywords: Trait gratitude, psychological well-being, late adolescents.

INTRODUCTION

"Gratitude unlocks the fullness of life... makes sense of our past, brings peace for today and creates a vision for tomorrow" was said by Melodie Beattie. Gratitude has been defined as a "positive emotion that stems from valuing and being aware of one's surroundings, such as the presence of helpful others; gratifying saints and even chance".¹ At a trait level, it is defined as "a generalized tendency to recognize and respond with grateful emotion to the roles of other people's benevolence in the positive experiences and outcomes that one obtains".² There is a strong link among happiness, well-being and mindfulness with gratitude.³ It is a positive psychological trait that is linked to individual's well-being.^{4,6} It has several other benefits, such as, decreasing suicide rate, illness, lessening loneliness, increasing energy, better sleep, optimism, higher self-esteem and improved ability to cope with difficult situations.^{2,7,8,9}

In recent years, its connectivity with psychological well-being (PWB) has been scientifically validated and regarded as a desired attribute with the ability to make life better for one as well as for others. Recent survey of WHO reported depression to be 4th leading cause of disability and illness among adolescents (aged 15–19 years).¹⁰ Among all the factors, that

contribute to have a strong well-being, gratitude is considered as one of the fundamental factors. Wong and Brown reported that gratitude detaches negative emotions and rumination from one's life.¹⁰ Despite of all the advantages of gratitude and its strong linkage with PWB, there are very few studies on trait gratitude among late adolescents in the Pakistani population. The aim of this study was to investigate the levels of various dimensions of trait gratitude and PWB among late adolescents the correlation between dimensions of trait gratitude and PWB.

METHODOLOGY

This quantitative study non-experimental cross-sectional included a sample of 378 late adolescents (18-20 years old) enrolled in FC, UOL and Punjab College, Lahore, Pakistan. The sample was selected using probability random sampling by using random number generators.¹¹ We multiplied the random number given by calculator with the 50% of the class size, and thus found the sample number to be selected from each class. Approval of study was received from the Board of Studies, University of Punjab, Lahore, (letter number RPCC/15).

For trait gratitude, questionnaire developed by Thomas and Watkins was used.¹² It consisted total of 16 questions (6 items for sense of abundance and

simple appreciation and 4 for appreciation for others) ranked on a 9-point Likert scale. Reverse scores of items 3, 6, 10, 11 and 15 were done. A higher score reflects a more elevated level of gratitude. Second questionnaire included PWB scale developed by Ryff which consists of 42 questions that are divided into 6 dimensions, autonomy; environmental mastery; personal growth; positive relations with others; purpose in life and self-acceptance. Each dimension contains 6 questions rated on a 6-point Likert scale.¹³

Statistical Analysis: Statistical analysis was performed using SPSS version 21. In order to control Type I error; addressing multicollinearity for regression analysis or organizing multiple highly correlated variables into more meaningful information, composite scores were calculated for all measures.¹⁴ Then, descriptive and inferential statistics were computed for data analysis.

RESULTS

Out of 378 participants, 30.2% were 18 years old, 36.5% were 19 years and 33.3% participants were 20 years old. Furthermore, 52.9% of the participants were males and 47.1% were females.

Levels of trait gratitude and PWB among late adolescents (N=378): In order to test first hypothesis, we identified the levels of GRAT and PWB into three levels: low, moderate and high. For this, firstly, the composite scores for the over-all gratitude and PWB scores were computed. Then, cut-off points for gratitude scale and PWB were made by subtracting the maximum score of both (i.e.

9 and 6 respectively) with a minimum score (i.e. 1) and then dividing it by three (the intended number of categories). Upon calculation, we got the interval value (2.667 and 1.667 respectively) which was then added up to the three categories giving 6.335 and 4.335 for moderate level and 9 and 6 for high level of GRAT and PWB respectively.

Using SPSS, these scores were recoded into three levels i.e. low, moderate and high and descriptive statistics were applied. Majority of late adolescents had moderate level of gratitude (82%), sense of abundance (74.9%), simple appreciation (50.8%) and appreciation of others (56.3%). Majority of them also reported moderate level of PWB (93.9%), autonomy (84.1%), environmental mastery (87.3%), personal growth (77.5%), positive relations with others (78%), purpose in life (77.8%), self-acceptance (78%) respectively. Generally, it can be seen that gratitude and PWB of female adolescents had higher levels than male adolescents.

Relationship among variables along with their dimensions: The assumptions of Pearson product coefficient were checked for testing 2nd hypothesis. It was found that the data violated the assumptions of Pearson as it was not normally distributed, contained some outliers and all variables showed monotonic relationship¹⁷ thus spearman correlation was used. Table 1 indicates a significant positive relationship between over-all GRAT and PWB ($r = .469, p < 0.01$) with moderate strength, as well as with each other's dimensions which means that higher the gratitude, higher will be PWB.

Table1. Relationship between trait gratitude, PWB and their dimensions.

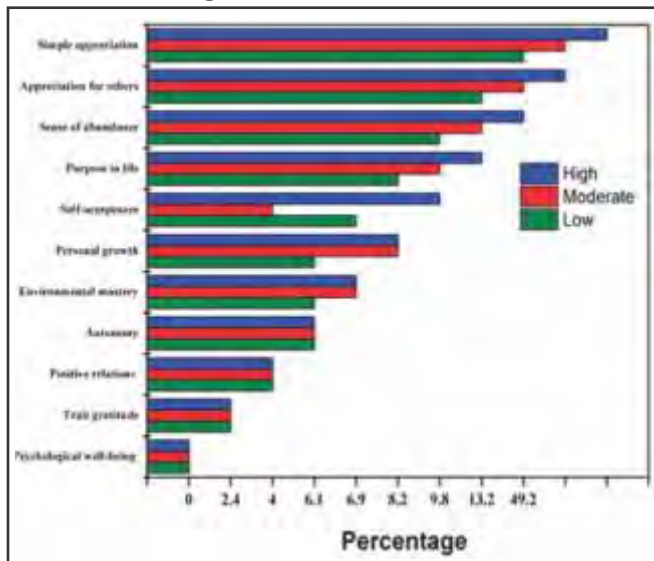
Variables	1	2	3	4	5	6	7	8	9	10	11
1. Gratitude	1.00	.450**	.371**	.764**	.469**	.232**	.180**	.373**	.324**	.279**	.334**
2. Sense of Abundance		1.00	.188**	.071	.147**	.066	.108*	.113*	.162**	.097	.170**
3. Simple Appreciation			1.00	.256**	.649**	.223**	.237**	.351**	.321**	.170**	.903**
4. Appreciation for Others				1.00	.354**	.166**	.069	.331**	.266**	.196**	.219**
5. PWB					1.00	.521**	.488**	.568**	.532**	.549**	.591**
6. Autonomy						1.00	.193**	.170**	.183**	.173**	.273**
7. Environmental Mastery							1.00	.095	.166**	.231**	.184**
8. Personal Growth								1.00	.147**	.231**	.337**
9. Positive Relations with Others									1.00	.212**	.271**
10. Purpose in Life										1.00	.143**
11. Self-Acceptance											1.00

Table 2. Hierarchical regression model after controlling demographic characteristics.

Variables	Model 1						Model 2					
	ΔR^2	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	ΔR^2	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
	.015						.286					
Constant		2.973	.385		7.721	.000***		2.039	.333		6.125	.000***
Age		.026	.018	.071	1.404	.161		.016	.015	.045	1.052	.294
Gender		.094	.041	.117	2.305	.022*		.052	.034	.065	1.499	.135
Gratitude								.223	.018	.538	12.740	.000***

Dependent variable: Psychological well-being. Note. *** $p < 0.001$, * $p < 0.05$. *SE* (Standard Error); *B* (Un-standardized Regression Coefficient); β (Standardized Regression Coefficients); ΔR^2 (R square change); *F* (F-test)

Fig. Levels of trait gratitude and PWB along with their dimensions among late adolescents.



Hierarchical regression: In this, two regression models were made by adding variables to a previous model. For model 1, gender and age were entered and the results revealed a model to be statistically significant ($p < 0.001$) (Table 2). The R^2 value (0.15) associated with this model suggests that age and gender account for 1.5% of the variation in PWB. After entering the trait gratitude at Step 2, the total variance explained by the model as a whole was 30%. GRAT explained an additional 28.6% of the variance in PWB, after controlling age and gender, $\Delta R^2 = 0.286$, F change = 57.03, $p < .001$. In the final model, GRAT was statistically significant with $\beta = .538$, $p < .001$. Thus, our third study hypothesis is accepted. Levels of trait gratitude and PWB along with their dimensions among late adolescents is shown in the Figure.

DISCUSSION

Previously, gratitude has been found to be positively associated with health and PWB.^{18,19} A study done by Anggraini and Palupi found a relationship between these gratitude and PWB among the victims of Lapindo Mud disaster.⁶ Similar results were revealed in another study, which reported PWB to be positively correlated with gratitude and negatively correlated with depression.²⁰ Similar results were found in the previous studies^{15, 16} Our results are similar to these studies.

Furthermore, a study that found a correlation among dimensions of trait gratitude and PWB also reported positive association among them.⁴ Gratitude has been found to contribute in increasing one's well-being and was found to moderate PWB.^{7,21} Gratitude has been considered as one of the mechanisms that enhance individual's PWB and has been determined as the most predictive variable for individual's well-being more than hope, life satisfaction and optimism, and was found to predict 35.4% of variance in well-being.^{19,22}

CONCLUSION

Majority of late adolescents reported moderate levels of trait gratitude and PWB, respectively. Trait gratitude and PWB had a significant relationship with each another. Gratitude positivity predicted PWB after controlling age and gender of participants. Since the gratitude level in this study accounts for additional 28.6% of variance in well-being, gratitude interventions can effectively be used to improve well-being level.

Author Contributions:

Conception and Design: Hira Naeem
 Collection and Assembly of data: Hira Naeem
 Analysis and interpretation of data: Hira Naeem
 Drafting of the article: Attiya Inam
 Critical revision of the article for important intellectual content:
 Farooq Sher
 Statistical Expertise: Farooq Sher
 Final approval and guarantor of the article: Attiya Inam
Corresponding author email: Attiya Inam:
 attiyainam@uhe.edu.pk
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