Disentangling The Link Between Positive Personality Traits And Mental Wellbeing Across Gender: The Role Of Cognitive Regulation

Dr. Shameem Fatima PhD[1], Dr Amena Zehra Ali, PhD[2], & Mahwish Abbas[3]

[1]*Tenured Associate Professor Psychology/Chairperson, Department of Humanities, COMSATS University Islamabad, Lahore. (Corresponding Author)*
[2]*Department of Psychology, University of Karachi, Karachi.*
[3]*Department of Psychology, Government College University Lahore.*
Running Head: Positive Personal Traits, Cognitive Regulation and Wellbeing
Postal address: 116-D, Izmir Society, Canal Bank, Lahore.

Abstract

Background: The COVID-19 pandemic is known to be a global and significant public health crisis. Similar public health challenges are expected in future in this rapidly advancing era of science and technology. Understanding protective factors such as psychological strengths and personal positive traits to better adapt such adversities may help individuals be prepared to combat such challenges. **Objectives**: This study aimed at assessing the explanatory role of cognitive emotion regulation in the association of the two positive personality traits, resilience and gratitude, with mental wellbeing among young men and women during the pandemic time. **Method**: In a cross sectional study design, a sample of young adults (N= 303; 153 women; M age = 30.17, SD=12.63) completed the study measures. **Results**: Results revealed significant indirect associations of gratitude and resilience with mental wellbeing explained through positive reappraisal. Only positive reappraisal, but not refocus on planning accounted for a significant variance in the associations of resilience and gratitude with mental wellbeing. In addition, gender significantly interacted with resilience to predicted positive reappraisal; and the conditional indirect associations between resilience, positive reappraisal, and mental wellbeing were stronger form women compared to men. **Conclusion**: Findings highlight the relevance of positive personality traits and positive reappraisal in wellbeing during the pandemic in the presence of limited availability of external resources and suggest the potential utility of interventions aimed at improving resilience, gratitude, and positive emotion regulation to improve wellbeing of young adults.

Keywords: Resilience, Gratitude, Mental Wellbeing, Positive Reappraisal, Refocus on Planning.

Introduction

Mental wellbeing, an integral part of health and individuals' adaptation process, has been defined as a state which enables an individual to realize his abilities, cope with routine stressors, and work productively to contribute to community (WHO, 2018). Being a state dependent phenomenon, mental wellbeing is greatly influenced by situational and environmental stressors. In the context of COVID-19 pandemic, maintaining mental wellbeing has become a significant challenge as the pandemic has brought about many changes, uncertainties, and associated challenges including social and economic crisis, social distancing, and elevated fear which have greatly impacted individuals' mental health

(Mumtaz, 2020). Research data from various countries has highlighted many mental health issues associated with the pandemic (e.g., Thomas & Barbato, 2020). Similar challenges are expected in future. The largest international Delphi panel discussing Grand Challenges in the Global Mental Health has suggested to identify personal resources as a means of assisting individuals to fight challenges and adjust well to circumstances (Collins et al., 2011). In addition, mental health problems are generally common in youth because young individuals experience various psychological, emotional, and adaptive challenges, particularly when they are stepping in the adulthood life stage. Therefore, research on youth mental wellbeing requires attention of researchers. However, there is a little research on positive personality traits as positive resources to combat the challenges of the pandemic and to improve mental wellbeing of individuals. Therefore, the present study analyzed the variances explained by resilience and gratitude in mental wellbeing of young adults.

The evidence from extant studies shows that positive character strengths such as resilience and gratitude protect individuals from adversities and help in dealing with crisis such as COVID-19 pandemic (Arnout & Almoied, 2020; Färber & Rosendahl, 2020). Resilience is defined as positive personality trait that manifests itself in response to challenging life circumstances often stimulated by temperament traits of low harm avoidance and high persistence and is associated with a mature, optimistic, and perseverative trait patterns (Cloninger et al., 2012). In the study, we consider it a personality characteristic because it is seen a stable resource to respond to adversities in a flexible manner (Farber & Rosendahl, 2020) and is also strongly linked with other personality characteristics (Oshio et al., 2018). It enhances individual adaption and is a marker of wellbeing and a psychologically mature personality (Färber & Rosendahl, 2020; Cloninger & Zohar, 2011; Drybye & Shanafelt, 2012). Findings support the

inclusion of resilience as a component of optimal functioning and wellbeing. Resilient individuals tend to recover from setbacks or adversities because of a psychologically mature set of personality traits, which help them cope with difficulties in life (e.g., McAllister & McKinnon, 2009).

Empirical and review studies support that resilience enhances wellbeing (e.g., Arnout & Almoied, 2020; Färber & Rosendahl, 2020). Similar associations between resilience and subjective wellbeing have also been reported for youth samples (e.g., Liu et al., 2013). In the body of literature on determinants of mental health, resilience stands out as a significant factor of wellbeing (Cloninger & Zohar, 2011; Drybye & Shanafelt, 2012), healthy adjustment, and coping with trauma (e.g., North & Cloninger, 2012). However there is little in the literature on resilience as a factor of mental wellbeing in the context of COVID-19 Pandemic.

Gratitude, a general attitude of appreciation and thankfulness, has been conceptualized as a personality trait, a moral virtue, and a coping mechanism (Lambert et al., 2009). Gratitude can be conceptualized both as a trait (dispositional personality trait) and a situation based state phenomena (Roberts, 2004). Many authors advocate a strong theoretical association of gratitude with wellbeing (Watkins, 2004; Emmons, 2008). Besides theoretical support, many correlational and experimental studies provide empirical evidence for the association of gratitude with personality traits and wellbeing, mostly in youth samples (Dickerhoof, 2007; Froh et al., 2008; Froh et al., 2009; Wood et al., 2008). Apart from theoretical and empirical support, gratitude is also logically connected with wellbeing from a pragmatic viewpoint. Expressing gratitude and appreciation tends to produce an internalized positive state of satisfaction, which eventually fosters ones wellbeing.

Resilience and Gratitude Foster Cognitive Emotion Regulation for Better Wellbeing

It is known that resilience and gratitude tend to foster mental health and wellbeing, yet it remains less clear, which mechanism might promote the likely salutary benefits of resilience and gratitude on wellbeing. The current study focuses on two specific cognitive emotion regulation strategies, positive reappraisal and refocus on planning, as the potential intermediary mechanisms. Literature review reveals that resilience not only directly correlates with wellbeing but also indirectly by transforming the ability to regulate emotions to cope with stress. Resilience aids in adaptive coping by regulating cognitions and emotions. It makes easier to regulate oneself to adopt adaptive strategies in response to challenging circumstances (e.g., Tugade et al., 2004). For example, in a cross sectional analyses, Artuch-Garde and colleagues (2017) found a connection of resilience with self-regulation abilities in high-school students. Moreover, following the Garnefski's cognitive coping strategies, Min and colleagues (2013) found positive reappraisal and refocus on planning, as the two most significant correlates of resilience among adult population. Subsequently, Mestre et al. (2017) showed a connection of resilience with emotion regulation ability and positive reappraisal in adolescents.

Likewise, gratitude has also gained attention in research focusing on positive emotions given its significant role in fostering wellbeing. The study has considered cognitive emotion regulation as a mechanism modulated by gratitude and fostering wellbeing. Gratitude can boost person's ability to positively regulate cognitions and emotions which in turn create an elevated sense of wellbeing (Algoe, 2012; Wood et al., 2010). For example, when considering positive reappraisal as a regulation strategy, the dispositional trait gratitude tends to produce a positive internal state, thereby enabling individual to positively reappraise the situation by applying cognitive control. Similarly, the salutary benefits of gratitude can boost individual's ability to refocus on planning. Specifically, a positive emotional response is produced by positively reappraising the situation fostering a general sense of wellbeing (Boggio et al., 2019; Fatima et al., 2022). While discussing the potential intermediary role of emotional regulation in gratitude-wellbeing link, the proposition is supported by correlational studies showing connection between trait gratitude and healthy coping strategies (Wood et al., 2007) as well as by experimental analyses revealing the putative causal role of gratitude on emotion regulation (Boggio et al, 2019).

A related discussion focuses on gender differences in resilience, gratitude, and cognitive emotion regulation which is supported by evidence from correlational and neuroimaging studies (e.g., Fatima & Shahid, 2020; Froh et al., 2009; Lasota et al., 2020; McRae et al., 2008). The same is supported by common observations particularly in the cultural context of Pakistan. In this context, women are stereotypically perceived to be more emotional compared to men who are perceived to be more emotionally regulated. Evidence from neuroimaging studies also supports this assumption that men tend to involve lesser prefrontal and ventral striatal regions compared to women during emotional reappraisal processes and tend to show greater automatic emotional regulation (McRae et al., 2008). Therefore, it is quite likely that such gender differences may account for differential prediction of wellbeing from resilience and gratitude.

The Current Study

To sum up, it is known from earlier literature that resilience and gratitude foster wellbeing and promote positive emotional reappraisal and that gender differences are present in resilience, gratitude, and emotion regulation. However, the earlier literature is lacking in delineating the

intermediary role of positive reappraisal and refocus on planning in associating resilience and gratitude with mental wellbeing. Also, gender differences in emotion regulation may account for differential prediction of wellbeing from gratitude and resilience. In addition, the earlier literature on gratitude, resilience, and emotion regulation is mainly based on Western individualistic populations and clinical samples. Obviously, such evidence cannot be generalized to typically developing populations from collectivistic cultures in South Asian region.

Therefore, the researchers are specially interested to assess the following objectives on a sample of young adults from a collectivistic culture in South Asian region: i) whether positive reappraisal and refocus on planning (two selected positive cognitive emotion regulation strategies) mediate the associations of resilience and gratitude with mental wellbeing; and ii) whether gender interacts with gratitude and resilience to predict the selected emotion regulation strategies in the hypothesized mediated associations (see Figure 1 for conceptualized model).
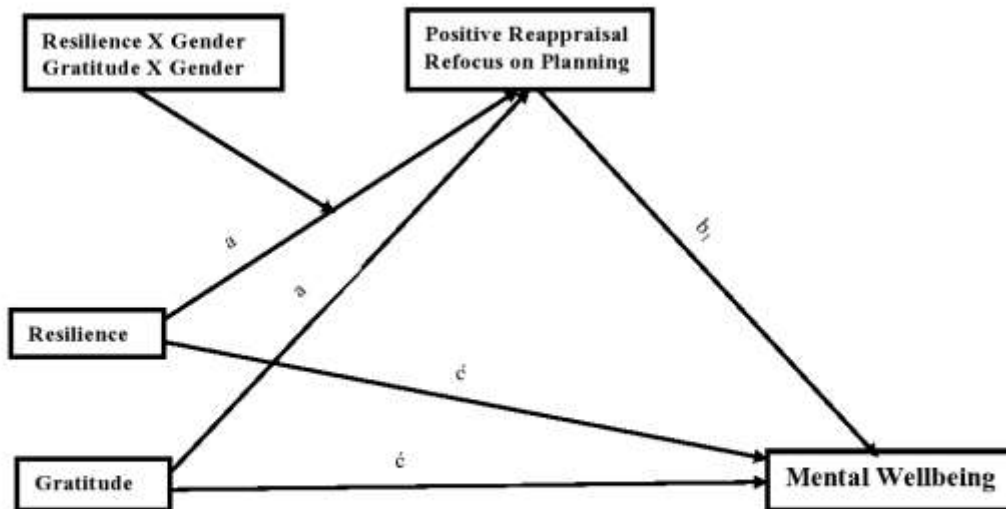

Figure 1: Conceptual model showing mediating role of positive reappraisal and refocus on planning in association of resilience and gratitude with mental wellbeing and moderating role of gender

Method

Sample

A sample of 311 healthy adults was approached through online Google forms. The Google form link was publicized through emails, social media apps, and smartphone applications including Wattsapp, Twitter, Instagram, and Facebook. The link directed to an online Google form that stated the study's nature, purpose, and eligibility criteria. Data of 8 participants were excluded during initial data screening for missing values

and outliers. The final sample included 303 participants (women: N=153; men: N=150; M age = 30.17, SD = 12.63) with no self-reported history of any neurological, psychiatric, or mental health condition. The participation in the study was voluntarily. On average, participants reported their education to be 14.43 (SD= 2.00) years of completed education. In addition, they reported their mean physical health score of 3.81 (SD=0.69) on a scale from 1-5. Regarding working status, 119 (39.3%) participants were working and the rest were either students (N=171,

56.4%) or non-working (N=13, 4.2 %). A total of 195 (64.4%) participants were financially dependent upon their guardians and the rest (n=108; 35.6%) were financially independent. Regarding socioeconomic status assessed on a 5 point categorical scale, they reported belonging to lower middle (N=6, 2%), middle (N=140, 46.2%), upper middle (N=138, 45.5%), and upper (N=19, 6.3%) socioeconomic status.

Resilience Scale

The resilience scale-6 items, assesses one's capability to bounce back from stressful events (Smith et al., 2008). A sample item states, "I tend to bounce back quickly after hard times". Responses are recorded on a 5-point Likert scale from 1 to 5 and three items (No. 2, 4, & 6) are reverse scored before computing a composite resilience score. The composite score with a potential range of 6-30 represents higher resilience from higher scores. In the present study, internal consistency of the scale is very good (Cronbach's Alpha =.85).

The Gratitude Questionnaire

The gratitude questionnaire is a 6 item, self-report measure (McCullough et al., 2002) to evaluate one's dispositional trait of thankfulness. A sample item states, "I have so much in life to be grateful for". With Likert type 7 point response format (1: strongly disagree to 7: strongly agree), a composite score (potential range: 6-42) is computed after reversing scores on items 3 and 6. Higher composite scores on the scale represent higher gratitude levels. Internal consistency of the scale is acceptable in the study (Cronbach's Alpha =.65).

Cognitive Emotion Regulation Questionnaire

The Questionnaire (Garnefski & Kraaij, 2007) assesses the use of specific cognitive emotion regulation strategies in reaction to stressful life situations. Comprising 36-items, the questionnaire assesses 9 emotion regulation strategies each assessed from 4 items. The study assesses two strategies namely positive reappraisal and refocus on planning. The items are scored on a 5-point Likert scale from 1 to 5. Higher composite scores (potential range=4-20) on each of these subscales represent more frequent use of each particular strategy. Internal consistencies of the subscales in the study are very good (.78 for positive reappraisal; & .87 for refocus on planning).

The Warwick–Edinburgh Mental Wellbeing Scale

The scale (Tennant et al., 2007) comprising 14 items is used to assess mental wellbeing. All items are scored on a 5-point response format from 1 (none of the time) to 5 (all of the time). Composite score obtained by adding item scores (likely range = 14-70) has shown a very good internal consistency in the study (α = .87).

Procedure

The study was approved by the Departmental Research Review Committee, XXX University. Keeping in view the pandemic lockdown, an online data collection mode was adopted. Ethical considerations were followed in data collection. A formal consent with electronic signatures was obtained from the participants in the Google form, after which the participants were directed to the assessment measures. Eligibility criteria, response format, and clear instructions were provided in the form. Confidentiality of their responses was assured and anonymity was maintained. Measures were randomized in order to balance order effect. No physical, emotional, or psychological harm to participants was involved in the study and their voluntary participation was cordially acknowledged.

Statistical Analyses

The current data set was analyzed using IBM SPSS Statistics Version 20. For internal consistency of the assessment measures,

Cronbach's Alpha coefficients were computed. Also, descriptive statistics of the study variables were generated. For inferential data analysis, initially, bivariate Pearson product-moment correlation coefficients were calculated to assess the associations between two personality traits, cognitive emotion regulation strategies, and mental wellbeing. Given the evidence that demographics are significant predictors of wellbeing and quality of life (Fatima, 2022), correlation of demographics including age, education and overall physical health was calculated to rule out any confounding due to demographics. Differences across categorical demographic variables were calculated on mediator and criterion variables. Next, for mediation and moderated mediation, the SPSS PROCESS macro (Preacher & Hayes, 2008) was used. First, two separate sets of mediation models (Model 4 in PROCESS) were analyzed, one analyzing resilience as a predictor and the second set analyzed gratitude as a predictor of mental wellbeing assessing two mediators, positive reappraisal and refocus on planning. Model 4 provided significance of the mediation model as well as the total, direct, and indirect effects of predictor on outcome variable. Likewise, two separate sets of moderated mediation models (Model 7 in PROCESS) were calculated each analyzing resilience or gratitude as a predictor.

For moderated mediation, Model 7 provided significance of interaction terms as well as conditional indirect effects of predictor on outcome variable across levels of the moderator. In all mediation and moderated mediation models, demographic confounds (age, socioeconomic status, financial status, and overall physical health) were covaried for mediators because of the significant correlations.

Results

Descriptive analyses revealed that all study measures showed good internal consistencies (see Table 1). Results from demographic correlations showed that age and physical health were significant correlates of only refocus on planning. None of the demographic variable significantly correlated with mental wellbeing. From categorical demographic variables, socioeconomic status and financial status were turned out to be significant factors of both emotion regulation strategies. Gender was a significant factor of only refocus on planning with women scoring higher compared to men on this variable. Therefore, the significant demographic factors of cognitive emotion regulation strategies including age, financial status, socioeconomic status, and physical health were covaried for mediators in final mediation and moderated mediation models.

Table 1 Correlations between Resilience, Gratitude, Emotion Regulation, and Mental Wellbeing

	Variables	M(SD)	α	4	5	6	7	8
1	Age	30.17(12.63)	-	-.17**	.14*	-.35***	-.07	-.05
2	Education	14.43(1.99)	-	.01	.19**	.01	.05	.06
3	Physical Health	3.81(0.69)	-	.07	-.08	-.24***	-.07	-.02
4	Resilience	17.39(4.67)	.85	-	.14*	.18**	.20**	.30***
5	Gratitude	32.89(4.64)	.65		-	.04	.21**	.32***
6	Refocus on Planning	12.58(3.64)	.87			-	.56***	.44***
7	Positive Reappraisal	14.90(3.09)	.78				-	.57***
8	Mental Wellbeing	48.10(8.03)	.87					-

Note. *=P<.05, **=P<.01, *=P<.001.

Next, the correlational findings showed that resilience and gratitude as well as two cognitive emotion regulation strategies were positive correlates of mental wellbeing. Also, resilience was a positive correlate of both positive reappraisal and refocus on planning but gratitude was a positive correlate on only positive reappraisal (see Table 1). Hence for mediation and moderated mediation models, the two regulation strategies were analyzed as simultaneous mediators for resilience-wellbeing link and only positive reappraisal was analyzed as a single mediator for gratitude-wellbeing link.

Table 2 Moderated Mediation Model Representing Conditional Indirect Associations between Resilience, Regulation Strategies, and Mental Wellbeing

Predictors	Outcomes Variables				
	Model 4			Model 7	
	ROP	PR	MWB	ROP	PR
	B(SE)	B(SE)	B(SE)	B(SE)	B(SE)
Age	-.12(.11)	.34(.11)**	-	-.06(.11)	.35(.12)**
Financial Status	.27(.22)	.76(.24)**	-	.12(.22)	.74(.24)**
Socioeconomic Status	-.39(.10)***	-.41(.11)***	-	-.36(.10)**	-.37(.11)**
Physical Health	-.17(.06)***	-.02(.06)	-	-.12(.06)	-.02(.07)
Resilience	.10(.06)	.17(.06)*	.18(.05)**	.11(.18)	-.21(.20)
ROP	-	-	.17(.07)*	-	-
PR	-	-	.43(.07)***	-	-
Gender				.48(.15)**	.07(.17)
Resilience X Gender				-.01 (.12)	.28(.13)*
R2	.23	.14	.37	.27	.16
Model fit: F(df)	12.12***	0.51***	39.57***	10.30***	5.34***
	(5,297)	(5, 297)	(3,299)	(7,295)	(7,295)
Total effect	.29(.07)***				
Direct Effect	.18(.06)**				
Indirect Effect (ROP)	.02(.01); Sobel z = 1.30, Conditional Indirect effects: M =.02(.02); W= .02(.02)				
Indirect Effect (PR)	.08(.03); Sobel z = 2.35*, Conditional Indirect effects: M =.03(.04); W=.15(.06)				

Note. *=P<.05, **=P<.01, *=P<.001; RP= Positive Reappraisal; ROP=Refocus on Plnning; MWB= Mental Wellbeing; M= Men; W=Women

Table 3 Moderated Mediation Model Representing Conditional Indirect Associations between Gratitude, Positive Reappraisal, and Mental Wellbeing

Predictors	Outcome Variables		
	Model 4		Model 7
	PR	MWB	PR
	B(SE)	B(SE)	B(SE)
Age	.22(.12)	-	.21(.12)
Financial Status	.58(.24)*	-	.49(.25)*
Socioeconomic Status	-.48(.11)***	-	-.47(.11)***
Physical Health	.01(.06)	-	.03(.07)
Gratitude	.22(.07)**	.22(.05)***	.44(.22)*
PR	-	.52(.06)***	-

Gender	-	-	.11(.17)
GratitudeXGender	-	-	-.14(.13)
R2	.16	.37	.16
Model fit:F(df)	7.24***	56.57***	5.37***
	(5,297)	(2,299)	(7,294)
Effect	Total=.33(.07)***, Direct= .22(.06)**, Indirect= .11(.05); Sobel z= 2.95**		
Conditional Indirect effects: Men =.15(.08); Women= .08(.05)			

Note. *=P<.05, **=P<.01, ***=P<.001; RP= Positive Reappraisal; MWB= Mental Wellbeing

The second mediation model tested only positive reappraisal as a mediator of the gratitude –mental wellbeing link because gratitude was significantly associated with only positive reappraisal but not with refocus on planning. The findings from this model revealed that positive reappraisal significantly and partially mediated the positive gratitude-mental wellbeing link. The total effect of gratitude on mental wellbeing reduced from 0.33 to 0.22 with a significant indirect effect of 0.11 (Sobel z = 2.95, p <.01). Lastly, results from the second moderated mediation model revealed that gender did not significantly interact with gratitude to predict positive reappraisal and moderate the mediated link between gratitude-positive reappraisal-wellbeing (see Table 3 & Figure 2).
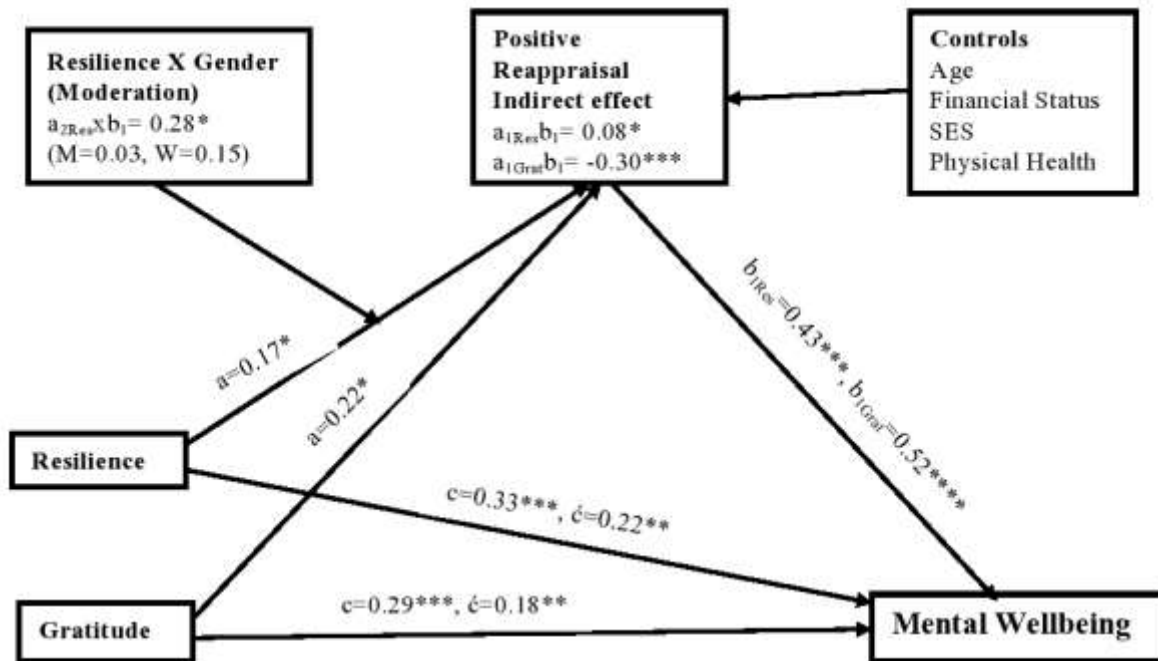

Figure 2: Moderated mediation model showing conditional indirect associations between resilience, gratitude, positive reappraisal, and mental wellbeing for men and women; Values shown are regression weights
Note: *= p< .05, **= p< .01;
c=Total effect; ċ= Direct effect; a_1b_1= Indirect effect; $a_{2Res}xb_1$= Moderation;

Discussion

Resilience and gratitude have been described to be the positive correlates and causally involved in wellbeing in the published body of research (e.g.,

Färber & Rosendahl, 2020; Froh et al., 2009). However, the mechanisms by which resilience and gratitude modulate wellbeing still need to be understood (Boggio et al., 2019). Cognitive emotion regulation is suggested to be one such intermediary mechanism (Boggio et al., 2019). Hence, the current study analyzed two selected cognitive emotion regulation strategies as the potential mediators of the resilience, gratitude, and mental wellbeing link. The findings partially supported the hypothesized mediated associations by showing that only positive reappraisal mediated these associations. The present study further aimed to investigate the moderating role of gender in the tested mediational links. Partially consistent with the hypothesis, gender moderated the mediated links between resilience, positive reappraisal, and mental wellbeing only. The findings of the study demonstrate a positive intermediary role of positive reappraisal in predicting mental wellbeing from resilience and gratitude.

Consistent with the literature (e.g., Liu et al., 2013), it was found that resilience positively correlated with mental wellbeing of adults in the context of pandemic. The evidence from diverse studies shows that positive personality traits such as trait resilience protect individuals from adversities and help in dealing with crisis (Arnout & Almoied, 2020; Färber & Rosendahl, 2020). Hence, the study findings extend this literature by adding the evidence from the particular context of the COVID-19 pandemic. Moreover, like many earlier studies (Wood et al., 2008), the present study revealed that gratitude works as a general positive trait to foster wellbeing of adults. Previously, diverse correlational as well as experimental studies demonstrated the general promoting effects of gratitude on wellbeing (e.g., Deng et al., 2018; Dickerhoof, 2007; Froh et al., 2009; Watkins et al., 2015; Wood et al., 2008).

Pertaining to the mediation hypothesis, the present study revealed that positive reappraisal mediated the association of trait

resilience and gratitude with mental wellbeing. The study showed the two positive cognitive emotion regulation factors to be the positive correlates of wellbeing. Also, the results revealed that resilience was the positive correlate of both emotion regulation strategies and gratitude was the positive correlate of only positive reappraisal. The findings clearly line up with earlier studies showing positive association of emotion regulation and emotion reappraisal with wellbeing (e.g., Haga et al., 2009). The significant correlations of resilience and gratitude with mental wellbeing on one hand and with positive reappraisal and refocus on planning on the other hand (gratitude was significantly associated with only positive reappraisal) were considered signifiers of the mediation and moderated mediation hypothesis. Thus, the present study investigated the mediating roles of positive reappraisal and refocusing on planning in addition to assessing the direct associations of resilience and gratitude with mental wellbeing. Although we only considered only two cognitive emotion regulatory factors (positive reappraisal and refocus on planning), the study's findings are partially congruent with the findings from many diverse studies showing the fostering effects of gratitude on positive reappraisal as an indicator of cognitive emotion regulation (e.g., Boggio et al., 2019). Hence, the study's results extend the earlier literature established by the correlational and experimental studies on the independent links of resilience and gratitude with wellbeing and with emotion regulation. By investigating cognitive emotion regulation strategies as mediators, the study provides a preliminary evidence for emotion regulatory mechanisms working behind the apparent effects of positive personality traits on wellbeing. Notably, by controlling many significant demographic confounds of emotion regulation factors (age, financial status, socioeconomic status, physical health etc.) the mediational findings can be relied on more confidently and the findings can be

applied to adults belonging to varied contexts but not necessarily all contexts. However, future research should address the longitudinal effects of such traits on wellbeing explained by emotion regulation. The findings also suggest assessing other positive emotion regulation factors as intermediate mechanisms for the positive links of resilience and gratitude with wellbeing.

Finally, results from moderated mediation analyses showed that gender significantly interacted with resilience to predict positive reappraisal and moderated the mediated associations between resilience, positive reappraisal, and mental wellbeing. Positive reappraisal strongly mediated the resilience-wellbeing link in women compared to men. Though this particular finding apparently seems contrary to the literature describing men to be more emotionally mature and auto-regulated, yet it highlights a unique point that automatic regulation in men is not necessarily associated with wellbeing. Instead, if women are more resilient, they compared to men can positively reappraise the adversities in a better way, eventually presenting better wellbeing. Empirical support for this particular finding is also present from an earlier study in the same cultural context revealing similar findings (Fatima & Shahid, 2020). Thus, the study introduced a new information on the resilience-positive reappraisal-wellbeing link by analyzing gender as a moderating factor.

Limitations and Implications

The study presents few limitations. First, correlational study design does not allow us to make causal inferences about the analyzed associations. A secondary limitation is the small sample size. A larger sample size may provide more reliable estimates to the effects. Despite the limitations, in line with the suggestions proposed by Boggio et al. (2019), the study advances the previous literature in a certain way to fill the gap in literature by assessing the underlying mechanisms, by which resilience and gratitude may act to promote benefits for wellbeing.

The findings have implications for counselors. To cope with adverse life experiences associated with the pandemic, promotion of wellbeing has been emphasized as an important strategic footstep (Arslan, 2020; Fatima et al., 2018). The findings are useful in drawing attention of counselors to provide effective counseling services particularly focusing at fostering gratitude and resilience traits in young individuals for ultimate wellbeing goal achievement. Because of the clear empirical associations of resilience and gratitude with mental wellbeing, the findings highlight the importance of the two traits to be included as an objective for public health policy. Lining up with the findings, training and promoting resilience and gratefulness during school years can help make these characteristics parts of personality traits in university years. These healthy skills would help them cope up with the adverse circumstances in their forthcoming future years. Moreover, promoting these two positive traits would reduce the health care cost given that these traits have important role in public health. Empirical evidence provides support for the efficacy of gratitude interventions for wellbeing enhancement (Dickens, 2017). The findings also call for increased planning and implementation of training programs focusing on cognitive and emotional learning and regulation.

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