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Role of Emotion Regulation in Quality of Life

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ABSTRACT

The purpose of this study was to investigate the association between Emotion Regulation and quality of life. Five hundred and thirty-eight adults, 262 men and 276 women, selected through random sampling method participated in the study. Emotion Regulation Questionnaire (ERQ) and Quality of Life-BREF scale (WHOQOL-BREF) were used to gather data. Results of the study revealed a significant correlation between the variables; however, reappraisal showed a positive relationship with quality of life while suppression showed a negative relationship. There was no gender difference.

Keywords: *Emotion Regulation, Quality of Life, Reappraisal, Suppression of Emotion.*

Emotions figure extremely prominent in our lives that it's hard to imagine not having them, they are generally believed to play a crucial role in shaping individuals' behavior. Thus, regulation of emotions in an adaptive manner is considered as vital aspect for quality of life. According Gross (1998, p.275) emotion regulation is "the process by which individuals influence which emotions they have, when they have them, and how they experience and express them", whereas Gross and Thompson (2007) defined regulation as the automatic or controlled, conscious or unconscious process of individuals influencing emotions in self, others, or both.

World Health Organization (2005) defines Quality of life as an individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. Quality of life is an overall general well-being that comprises objective descriptors and subjective evaluations of physical, material, social and emotional well-being together with the extent of personal development and purposeful activity, all weighted by a personal set of values (Felce, &Perry, 1995).

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Regulation of emotion is labeled as the effective use of specific adaptive emotion regulation strategies (see Gross, 1998, Gross & Thomson, 2007). Compass (1998) suggests that emotion regulation strategies, specifically reappraisal are associated with fewer behavioral, emotional and substance abuse problems. Research findings suggest that one of the most effective strategies for emotion regulation is 'reappraisal' which involves changing one's emotional experience by changing the meaning of the emotion-eliciting stimulus. Cognitive reappraisal neutralizes a potentially emotion-eliciting situation before negative emotions are triggered (i.e., thinking about the situation in a manner such that one does not respond emotionally). The use of reappraisal has been related to positive affect, healthy social functioning, increased quality of life and decreased depression symptoms (Gross & John 2003). Reappraisal has been linked with many domains of psychological health, including self-acceptance, clear life purpose, and high autonomy. It has also been linked to closer relationships, decreased symptoms of depression, increased life satisfaction, higher optimism, and higher self-esteem (John & Gross 2004).

Expressive suppression involves inhibiting ongoing behavior to make the experience of emotion not evident to others through facial expressions and other behavioral manifestations of the emotion (John & Gross 2004). However, suppression behavior does not reduce the emotional content generated, but merely controls the outward expression of an individual's response to psychologically relevant situation (Gross & Thompson 2007). This regulatory mechanism has been related to increased levels of negative emotion, increased rumination regarding negative mood, decreased interpersonal function and quality of life (Butler et al., 2003; Gross & Levenson 1997; Gross & John 2003; John & Gross 2004). Emotion regulatory processes are central to mental health; they can either support or disrupt the capacity to work, relate to others and enjoy oneself (Gross & Munoz 1995). In two experiments by Butler et al., (2003) revealed that suppression disrupted communication and magnified blood pressure responses in the suppressors' partners. Suppression had a negative impact on the regulators' emotional experience and increased blood pressure in both regulators and their partners. Suppression also reduced rapport and inhibited relationship formation (Butler et al., 2003). Psychopathic traits positively related to maladaptive emotion regulation strategies such as suppression (Heinzen, Koehler, Smeets, Hoffer, & Huchzermeier, 2011). In a series of experimental and individual difference studies Gross and his colleagues tested the affective, cognitive and social consequences of reappraisal and expressive suppression. Across experiments, researchers found that, affectively, reappraisal had a positive impact (decreasing negative emotion experience) whereas expressive suppression had a negative impact (decreasing positive emotion experience). Cognitively, reappraisal did not affect memory, but expressive suppression impaired memory for social information, in the social domain too, suppression compromised social functioning, whereas reappraisal did not (Gross, 2002; Gross & John, 2003; Gross, Richards & John, 2006; John & Gross, 2004). Reappraisal enhances recall and suppression of emotion-expressive behavior impairs recall (Dillon, Ritchey, Johnson, & LaBar, 2007). Psycho-physiologically emotion suppression leads to a transient increase in sympathetic activation, psychosocially it significantly

alters the material and emotional support that social partners provide thereby indirectly influences cardiovascular health (Nyklíček, Zeelenberg, & Vingerhoets, 2011). Emotion suppression is associated with enhanced sympathetic nervous system reactivity and might lead to cardiovascular disease (Butler et al., 2003; Mauss & Gross, 2004), whereas cognitive reappraisal is generally related to decreased negative affect without any accompanying sympathetic nervous system activation (Butler et al., 2003; Ochsner et al., 2004). Emotional health, or more specifically the ability to efficiently regulate emotion is likely to be a strong determinant of psychological and physical health (Hamilton et al., 2009). The review of the literature reveals that regulating emotions are thought to influence all domains of quality of life. In the present study, we examined the relationship between emotion regulation strategies (i. e., reappraisal and expressive suppression) and quality of life across genders.

METHOD

Sample and Procedure

For the present study, 538 adults (262 men and 276 women) were selected by simple random sampling procedure from Mysore region. The age range between 20 to 39 (mean age = 29.86, SD = 4.22). Only those who have minimum 12^{th}-grade education were selected keeping in mind that the participants can comprehend questions properly and respond appropriately. After getting the consent, participants were administered demographic data sheet, Emotion Regulation Questionnaire (ERQ) and Quality of Life-BREF Scale. After the completion of the questionnaires, each questionnaire was checked to make sure that the participants responded to all the items.

Materials

Emotion Regulation Questionnaire (ERQ) is a 10 item self-reporting questionnaire with 7-point rating scale developed by Gross and John (2003). It was developed to assess two major emotion regulation strategies namely Reappraisal and Suppression. Chronbach's Alpha of this questionnaire is 0.79 for Reappraisal and 0.73 for Suppression. Test-retest reliability is 0.69.

WHOQOL-BREF is a self-report measure consists 26 items 5 point Likert scale, developed to encompass the physical, psychological, social and environmental aspect of subjective well-being which is the wide range of facets approved by international accord. Domain scores were scaled in a positive direction (higher scores denote better QOL), with a score range of 4-20 that were transformed to 0-100 scale according to the standard procedure defined in WHOQOL user manual. The WHO-QOL group created the WHOQOL-BREF (Harper & Power, 1998) as a more user-friendly measure of QOL that could be applied cross-culturally. Each domain covered in this scale has high test-retest reliability that is 0.66 for physical health, 0.72 for psychological, 0.76 for social relationships and 0.87 for the environment. WHOQOL-BREF correlated highly (r = 0.89) with the original WHOQOL-100 domain scores.

RESULTS

The purpose of present study was to investigate the relationship between emotion regulation and domains of the Quality of life namely Physical health, Psychological, Social relationship and Environment.

Table 1: Correlation between emotion regulation (reappraisal and suppression) and Quality of life

	1	2	3	4	5	6
1. Reappraisal	_					
2. Suppression	.226**	_				
3. Physical Health	.198**	-.065	_			
4.Psychological Health	.100*	-.015	.497**	_		
5. Social Relationship	.140**	-.041	.314**	.230**	_	
6. Environment	.121**	-.106*	.503**	.461**	.283**	_

Note. *p <0.05. **p < 0.01.

In order to ascertain the purpose, Pearson product moment correlation was used. Obtained results are displayed in table 1 which reveals that reappraisal has significantly positive association with all the domains of Quality of Life. Another emotion regulation strategy has a negative relationship with all the domains of Quality of Life. However, the negative relationship with environment domain of Quality of Life is statistically significant.

Although findings of correlation are showing that these strategies are related to domains of quality of life, but it does not show the relative significance of these two strategies in predicting quality of life. Hence, to address this objective a series of step-wise multiple regression analysis was conducted using emotions regulation strategies as predictor variable and domains of quality of life as a criterion. The obtained results are displayed in table 2.

Table 2: Regression analysis, subscales of Reappraisal and Suppression as predictors and domains of QOL as criterion variables (method = stepwise)

Gender with ERQ subscales	Quality of Life							
	Physical Health		Psychological		Social relationship		Environment	
	β	t	B	t	β	t	β	t
Gender	-.013	-.31	-.28	2.33	-.01	-.142	.55	1.282
Reappraisal	.224	5.18***	.10	-.64*	.14	3.267***	.152	3.49***
Suppression	-.116	-2.68**	-.04	-.91	-.76	-1.74	-.140	-3.21***
Model	F (2,535) = 14.63, p=0.001		F (2,535) = 5.406, p=0.020		F (2,535) = 10.68, p=0.001		F (2,535) = 9.168, p=0.001	
Explained variance (R^2)	5.2%		1.0%		2.0%		3.3%	

Note. *p <0.05, **p <0.01. ***p < 0.001

The table 2 shows that reappraisal has positive association and suppression has a negative relationship, both are the best predictor of physical health. Positive reappraisal emerged as best predictors of psychological and social relationship. Finally, both the strategies emerged as the best predictors of environment domain, which reappraisal has positive association while suppression has a negative relationship.

Table 3: showing results of independent sample t-test for Gender difference in Emotion Regulation and Quality of Life

	Gender				df	t	p
	Men		Women				
	Mean	SD	Mean	SD			
Reappraisal	28.76	6.34	28.58	6.43	536	.327	.744
Suppression	17.13	4.87	16.81	4.83	536	.727	.468
Physical Health	69.13	14.82	69.25	15.12	536	-.092	.927
Psychological	66.43	13.67	64.95	14.44	536	1.181	.238
Social relationship	64.68	16.22	66.44	16.78	536	-1.192	.234
Environment	62.31	14.95	65.25	15.07	536	-2.182	.030

Independent t-test was used to find out the gender difference, no significant gender difference was found in emotion regulation, but in Quality of Life, the gender difference existed inenvironment domain, no significance difference in rest of the domains.

DISCUSSION

The objective of the present study was to examine the relationship between emotion regulation and Quality of Life and to find out gender difference. The findings of the study indicate that reappraisal is positively associated with all the domains of Quality of Life. This reveals that frequent use of reappraisal result sinenhanced quality of life. In line with the previous findings (Gross & John, 2003; Gross, 2004). The present study supports the notion that reappraisal is an adaptive emotion regulation strategy. Researchers emphasize that reappraisal has a positive impact in decreasing negative emotional experiences, facilitating social and cognitive functioning. Thus, increasing environmental and psychophysiological health (Gross, 2002; Gross & John, 2003; Gross, Richards & John, 2006; John & Gross, 2004). The results of the present study support these findings. On the other hand, suppression is negatively related to quality of life which indicates that frequent use of suppression in regulating emotions leads to poor quality of life. Earlier studies reveal that suppression is a maladaptive strategy which has a negative impact on psychophysiological functions and also affects on social relationship (Butler et al., 2003; Dillon, Ritchey, Johnson, & LaBar, 2007; Mauss & Gross, 2004; Nykilick, Zeelenberg, &Vingerho ets, 2011; Ochsner et al., 2004). In line with the previous findings, the present study

also supports that suppression has a negative association with quality of life. Eventually, habitual use of suppressing emotions for a longer duration has an adverse effect on all domains of quality of life. Further, no significant gender difference was found in emotion regulation and quality of life.

In summary, it is evident that reappraisal has a positive relationship with quality of life, also it emerged as the best predictor and facilitates the overall quality of life of an individual, whereas suppression has negative effect on quality of life and emerged as best predictor in poor physical health and environment domain of quality of life. There is no gender difference in emotion regulation and quality of life, further research needs to focus on this aspect and clarify the gender differences.

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Conflict of Interests
The author declared no conflict of interests.

REFERENCES

Butler, E. A., Egloff, B., Wilhelm, F. H., Smith, N. C., Erikson, E. A., & Gross, J. J. (2003). The social consequences of expressive suppression. *Emotion*, 3, 48-67.

Compas, B. E., (1998). An agenda for coping research and theory: basic and applied developmentalissues. *Int. J. Behav. Dev.* 22, 231–37.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research. *Psychological Bulletin*, *127*(1), 87–127. https://doi.org/10.1037//0033-2909.127.1.87

Dillon, D. G., Ritchey, M., Johnson, B. D., & LaBar, K. S. (2007). Dissociable effects of conscious emotion regulation strategies on explicit and implicit memory. *Emotion (Washington, D.C.)*, *7*(2), 354–365. https://doi.org/10.1037/1528-3542.7.2.354

Felce, D.,& Perry, J. (1995) 'Quality of Life: Its Definition and Measurement', Research in Developmental Disabilities, 16(1), 51–74.

Gross, J. J. (1998). The emerging field of emotion regulation: an integrative review. *Review of General Psychology*, *2*(5), 271–299. https://doi.org/10.1017.S0048577201393198

Hamilton, N. A., Karoly, P., Gallagher, M., Stevens, N., Karlson, C., & McCurdy, D. (2009). The assessment of emotion regulation in cognitive context: The emotion amplification and reduction scales. *Cognitive Therapy and Research*, *33*(3), 255–263. https://doi.org/10.1007/s10608-007-9163-9

Heinzen, H., Koehler, D., Smeets, T., Hoffer, T., & Huchzermeier, C. (2011). Emotion regulation in incarcerated young offenders with psychopathic traits. *Journal of Forensic*

Psychiatry & Psychology, *22*, 809–833. https://doi.org/10.1080/14789949.2011.623171

Gross, J. J., & Munoz, R. F. (1995). Emotion regulation and mental health. *Clinical Psychology: Science and Practice*, *2*, 151–164.

Gross, J. J., & Levenson, R. W. (1997). Hiding feelings: The acute effects of inhibiting positive and negative emotions. *Journal of Abnormal Psychology*, 106, 95–103.

Gross, J. J. (1998). The Emerging Field of Emotion Regulation: an integrative review. *Review of General Psychology*, *2*(5), 271–299. https://doi.org/10.1017.S0048577201393198

Gross, J. J. (2002). Emotion regulation (Reappraisal and Suppression): affective, cognitive, and social consequences. *Psychophysiology*, *39*(3), 281–291. https://doi.org/10.1017.S0048577201393198

Gross, J.J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348–362.

Gross, J. J., Richards, J. M., & John, O. P. (2006). Emotion regulation in everyday life. *Regulation*. https://doi.org/10.1177/1469540507081630

Gross, J. J., & Thompson, R. (2007). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.), *Handbook of Emotion Regulation* (pp. 3–24). New York: Guilford Press

Hamilton, N. A., Karoly, P., Gallagher, M., Stevens, N., Karlson, C., & McCurdy, D. (2009). The assessment of emotion regulation in cognitive context: The emotion amplification and reduction scales. *Cognitive Therapy and Research*, *33*(3), 255–263. https://doi.org/10.1007/s10608-007-9163-9

Heinzen, H., Koehler, D., Smeets, T., Hoffer, T., & Huchzermeier, C. (2011). Emotion regulation in incarcerated young offenders with psychopathic traits. *Journal of Forensic Psychiatry & Psychology*, *22*(August 2012), 809–833. https://doi.org/10.1080/14789949.2011.623171

John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes,individual differences, and lifespan development. *Journal of Personality*, 72, 1301–1334.

Mauss, I. B., & Gross, J. J. (2004). Emotion suppression and cardiovascular disease: Is hiding feelings bad for your heart? In. Temoshok, L. R., Nyklicek I., & Vingerhoets, A. (Eds.), *Emotional Expression and Health*, 62–81. New York: Brunner-Routledge.

Nyklíček, I., Zeelenberg, M., & Vingerhoets, A. (2011). Emotion regulation and well-being. *Emotion Regulation and Well-Being*, 1–331. https://doi.org/10.1007/978-1-4419-6953-8

Ochsner, K. N., Knierim, K., Ludlow, D. H., Hanelin, J., Ramachandran, T., Glover, G., (2004). Reflecting upon feelings: An fMRI study of neural systems supporting the attribution of emotion to self and other. *Journal of Cognitive Neuroscience*, 16, 1746–1772.

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