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Procrastination, Perfectionism, Coping and their Relation to Distress and Self-esteem in College Students

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The present study is aimed at examining procrastination, perfectionism, coping and their relationship with distress and self-esteem in college going students. One hundred and ninety two participants were assessed on measures of procrastination, perfectionism, coping, distress and self esteem. Data was analysed using Pearson's product moment correlations, independent samples of t-test and step wise linear regression analysis. Participants reported low level of distress and moderate level of self esteem. Moderate use of procrastination was reported. Female participants reported higher parental expectations, and greater use of avoidant focused coping method. Procrastination was negatively associated with adaptive perfectionism (personal standards and organization). Maladaptive perfectionism was associated with greater distress and lower self-esteem, while procrastination was associated with lower self-esteem but, not distress. Maladaptive perfectionism emerged as a significant predictor of both distress and lower self-esteem. Results highlight the importance of addressing procrastination amongst the student population.

Keywords: Procrastination, Perfectionism, Distress, Self-esteem, Coping.

Procrastination is described as the irrational tendency to postpone or delay tasks (Lay, 1986). It is widespread among the general population (Harriott & Ferrari, 1996), and is considered maladaptive due to its associations with low self-esteem and distress (Stead, Shanahan, & Neufeld, 2010; Steel, 2007). Students are particularly vulnerable to engage in procrastination as they are faced with the task of meeting multiple goals, within specified time frames. Students consider procrastination as being problematic (Solomon & Rothblum, 1984). Procrastination is not a unitary construct and researchers distinguish between active and passive procrastinators. Passive procrastinators are those who fail to complete the tasks on time, whereas active procrastinators are said to be those who postpone their task until the last minute and work better under pressure (Chu & Choi, 2005). Procrastination also includes behavioral, cognitive and affective dimensions (Rice, Richardson, & Clark, 2012).

Procrastination among Indian college students has been examined by several researchers highlighting the negative relationship between procrastination, academics and daily routines (Gohil, 2014; Lakshminarayan, Potdar, & Reddy, 2011; Manikandan & Sebin, 2013).

While various factors are likely to result in task postponement, perfectionism is one factor that has been studied in relation to procrastination. The term perfectionism is used to refer to a pattern of setting high personal standards for one's performance, along with excessive self-criticality. Perfectionism is considered to be a multi-dimensional construct (Hewitt & Flett, 1991; Frost et al., 1990) with adaptive and maladaptive aspects.

Excessive concern over mistakes, doubts about actions, parental expectations and parental criticisms are considered to be maladaptive aspects of perfectionism and are linked to greater maladjustment and psychopathology such as depression, eating disorders, anxiety and other maladaptive patterns (Flett & Hewitt, 2002; Shafran & Mansell, 2001; Soenens, Vansteenkiste, Luyten, Duriez, & Goossens, 2005). Adaptive perfectionism has been linked to higher academic achievement, and greater

use of adaptive coping (Ram, 2005). Adaptive perfectionists derive pleasure from their efforts, are more flexible with regards to goal attainment, set realistic standards and have high personal standards but, without self-criticism.

Perfectionism, especially when maladaptive, is seen as a pattern of faulty cognition leading to self-handicapping behaviours such as procrastination (Flett, Blankstein, Hewitt, & Koledin, 1992; Kearns, Forbes, Gardiner, & Marshall, 2008). Procrastinators place unrealistic demands on themselves and demonstrate cognitive characteristics associated with perfectionism. Both procrastination and perfectionism are associated with excessive fear of failure (Ferrari, 1994; Flett, Hewitt, Davis, & Sherry, 2004). Perfectionists engage in greater procrastination due to concern over their ability to achieve perfect results and to avoid making mistakes (Rice et al., 2012). Adaptive perfectionists engage in lesser procrastination as compared to non-perfectionists. In contrast, maladaptive perfectionists report that they procrastinate more frequently than adaptive perfectionists but, less frequently than non-perfectionists (Lippincott, 2010).

Some of the negative psychological outcomes of perfectionism and procrastination are lowered self-esteem and psychological distress (Dunkley, Blankstein, Halsall, Williams, & Winkworth, 2000). Self-esteem is the evaluative component of self knowledge and high and low self-esteem relate to favourable and unfavourable global evaluations of self, respectively (Rosenberg, 1965). Studies have indicated a negative association between procrastination and self-esteem (Solomon & Rothblum, 1984).

Coping behaviours help in achieving greater personal control over one's environment and in regulating emotions and guiding action towards altering a distressing situation (Folkman & Lazarus, 1985). Coping resources are predictive of psychological wellness and act as buffers for emotional disorders (McCarthy, Fouladi, Juncker, & Matheny, 2006). Individuals with greater adaptive perfectionism tend to use more problem focused coping, such as organization (Rice & Lapsley, 2001).

Students are particularly at risk of procrastination and distress due to academic pressures and the competitive nature of demands placed on them and the need to balance these demands successfully and effectively. These demands may also impact concerns over the ability to complete tasks, increase stress especially when goals are set unrealistically and further lead to use of procrastination or coping patterns that may be unhelpful in the long run. With reference to academic tasks both avoidant coping and vigilant coping (which involves worry and active information seeking) and control have been examined (Burns, Dittmann, Nguyen, & Mitchelson, 2000). However, few studies examine associations among procrastination, perfectionism and coping

Therefore, the present study examined procrastination and the role of perfectionism in procrastination. We also examined relationships among procrastination, perfectionism and coping and the role of procrastination and adaptive and maladaptive perfectionism, as predictors of distress (depression, anxiety and stress) and self-esteem.

Method

Sample

One hundred and ninety two participants were recruited from graduate, post graduate and professional colleges in Bengaluru from its urban areas. The selection of sample was carried out in two stages. Colleges meeting criteria for medium of instruction and located in urban Bengaluru were contacted for consent of participation. From the colleges that provided consent, classes were selected for administration.

The mean age of the sample was 21.22 years (SD =2.38) with 68.8% female and 31.3% male participants. More than half were undergraduate students from non professional colleges (N=109, 57%). A large majority belonged to an urban background (N=132, 69%). Participants with presence or past history of any psychiatric and/or physical illness, having previous consultations for mental health concerns were excluded using a question on demographic data sheet.

Measures

Lay Procrastination Scale (Lay, 1986) (student version) is a 20-item measure. Items are rated from 1= extremely uncharacteristic to 5= extremely characteristic. Higher scores reflect greater procrastination. The author reports a mean of 61.0 (SD=13.4; Range-21-91) from a study done on 550 college students (Lay, personal communication, 16 June, 2013). The scale has good reliability (Cronbach's alpha =0.82). For the present sample reliability was also established (Cronbach's alpha =.729).

Frost Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990), a 35-item questionnaire measures six dimensions of perfectionism: concern over mistakes (CM), doubts about actions (DA), personal standards (PS), parental expectations (PE), parental criticism (PC), and organization (O) on a 5-point Likert scale. Test retest reliability in an Indian sample ranged from 0.69 to 0.88 for sub-scales and 0.87 for total scale (Kumari, Sudhir, & Mariamma, 2012). Reliability in present sample was adequate (Cronbach's alpha=.875). Higher scores indicate higher perfectionism. Scores on O and PS were combined to arrive at the adaptive dimension. Maladaptive dimension was obtained by combining scores on CM, DA, PE and PC (Chang, Watkins, & Banks, 2004).

Brief COPE (Carver, 1997), is an 14 item, abbreviated form of COPE (Carver, Scheier, & Weintraub, 1989) with two items each measuring conceptually different coping styles. Three main coping strategies: problem focused, active emotional and avoidant emotional coping styles are derived by combining different subscales of the measure. The subscales have good internal consistency (Cronbach's alpha = .54 to .90).

Depression, Anxiety and Stress Scale (DASS) (Lovibond & Lovibond, 1995) is a 21 item self report measure with three scales measuring depression, anxiety and stress over the last week on a 4-point severity scale. The reliability in this sample was adequate (Cronbach's alpha=.89). Higher scores indicate greater distress. The cut-offs provided are 0-9 for depression, 0-7 for anxiety and 0-14 for stress. Severity of each of these subscales can also be interpreted based on the ranges provided (Lovibond & Lovibond, 1995).

Rosenberg Self Esteem (Rosenberg, 1965) is a 10 item measure, in which items are rated from strongly disagree to agree (3-0). Higher scores indicate higher self-esteem. Scores between 15 and 25 are considered to be within the normal range and scores below 15 suggest low self esteem. The scale has good internal consistency (Guttman scale coefficient=0.92) and test retest reliability of over two weeks (0.85 and 0.88).

Procedure

The protocol was reviewed and approved by a department review committee for ethical guidelines. College authorities were briefed about the study at the point of contact and their consent was sought. Participants were contacted for consent from colleges that provided permission. All participants provided written informed consent. All measures were administered in groups setting, in English.

Statistical analysis

Data was analysed using Statistical Software Package for Social Sciences 15.0 (SPSS 15.0). Associations among perfectionism, procrastination, coping, self esteem, anxiety, depression and stress were examined using Pearson's Product Moment Correlations. Gender differences were examined using independent samples of t-test. Stepwise linear regression analysis was conducted to explore procrastination and perfectionism as predictors of self esteem and distress.

Results

Scores on measures of procrastination, distress and self esteemThe obtained scores were interpreted against the respective norms. Participants reported a marginally lower lever of procrastination in comparison to the mean scores reported by the author (M = 61.0; SD=13.4). Scores on the sub scales of the DASS indicated presence of mild levels of anxiety, depression and stress and the overall distress was low. Participants' scores on the measure of self-esteem indicate that they experienced self esteem that was in the moderate range.

On the Brief COPE there was a greater use of active emotion focused coping, and marginally lower problem and avoidant emotion focused coping (Table 1).

Table 1. Scores on measures of perfectionism, procrastination, coping and psychological outcomes and difference across genders (N=192)

Measure	Total sample Mean	SD
Frost's multidimensional perfectionism Scale Total	81.51	81.51
Concern Over Mistakes (CM)	21.32 1	21.32
Personal Standards (PS)	22.72	22.72
Parental Expectation (PE)	16.97	16.97
Parental Criticism (PC)	9.35	9.35
Doubts Over Action (DA)	11.15	11.15
Organization (O)	22.57	22.57
Adaptive Perfectionism (PS+O)	45.29	45.29
Maladaptive Perfectionism (PE +PC+DA+CM)	58.79	58.79
Procrastination	56.14	56.14
Self Esteem	20.03	20.03
Depression	5.53	5.53
Anxiety	5.83	5.83
Stress	6.95	6.95
Depression Anxiety Stress Scale Total	36.66	36.66
Problem Focused Coping	21.08	21.08
Active Emotion Focused	25.37	25.37
Avoidant Emotion Focused	19.86	19.86

A significant gender difference was seen on dimensions of PE (t=-2.64, df=190, P<0,001) on FMPS and Avoidant Emotion Focused coping on the Brief COPE (t=2.63, df=190, P<0.01) with female participants scoring higher on both.

Associations among procrastination, perfectionism and coping

There was no significant association between the FMPS total score or maladaptive perfectionism and procrastination. Adaptive perfectionism (personal standards and organization) had a significant, negative association with procrastination, suggesting that with greater levels of organization and higher personal standards there is reduced procrastination (Table 2).

Table 2.Associations between perfectionism, procrastination and coping (N=192)

Measures	Problem focused (PFC)	Active Emotion Focused (ACF)	Avoidant Emotion Focused (AVF)
FMPS	.145*	.104	.344**
CM	.170*	.097	.256**
PS	.002	.003	.086
PE	.147*	.121	.339**
PC	.011	.037	.249**
DOA	.180*	.117	.351**
O	.037	-.057	.839**
AP	.021	-.030	.047
MP	.177*	.126	.390**
Procrastination	-.129	-.088	-.005

Significance (2 tailed) *p<.05, **p<.001 Note: FMPS= Frost Multidimensional Perfectionism Scale; CM= Concern over Mistakes; PE= Parental Expectation; PC=Parental Criticism; DOA= Doubts over action; O=Organization; AP=Adaptive Perfectionism; MP= Maladaptive Perfectionism

Procrastination and doubts over action were positively correlated indicating that with greater doubts over one's actions, there was likely to be a delay of tasks and procrastination.

The correlations between the subscales of the Brief COPE, procrastination and perfectionism indicated that there was no significant association between any of the subscales of coping and procrastination, indicating that procrastination differs from other forms of coping, although it may also be used to cope with negative emotions, that is by task delay. Maladaptive perfectionism was positively associated with use of avoidant focused coping. There was a significant association between the total FMPS and problem focused coping. Avoidant focused coping was positively associated with total FMPS

perfectionism, which indicates that with higher levels of perfectionism, there is greater use of avoidant focused coping.

Associations among procrastination, perfectionism, distress and self esteem

There was a significant and negative correlation between self esteem and distress (DASS total (r=.555, P<0.01) as well as anxiety (r=.465, P<0.01), depression (r =.575, P<0.01) and stress (r=.489, P<0.01).

The associations between procrastination and perfectionism and the experience of distress and self-esteem were examined. There were no significant associations between procrastination and the subscales of DASS. Self esteem, depression, anxiety, stress and the total score on DASS were negatively associated with each other.

There was a significant and negative correlation between procrastination and self esteem suggesting that with increased use of procrastination there is decreased acceptance of self and self-esteem is lower.

Total FMPS was positively associated with total DASS and with all the three subscales of the DASS, suggesting that with high levels of perfectionism there is greater experience of distress (Table 3).

Higher levels of maladaptive perfectionism (parental criticism and expectations, doubts over action and concerns over mistakes) were associated with greater distress (DASS total). Adaptive perfectionism was associated with the anxiety subscale on DASS and there was a low positive association between adaptive perfectionism and DASS total. Parental expectations of FMPS were positively correlated with overall distress.

There was a significant, negative association between the total FMPS and self-esteem. Maladaptive perfectionism was negatively associated with self esteem. Thus, with higher maladaptive perfectionism, there is a report of lower self-esteem. Amongst the adaptive dimensions only personal standards had a low, negative correlation with self esteem.

Predictors of distress and self-esteem

We explored the role of procrastination and perfectionism as predictors of distress and self-esteem using step wise linear regression. The total scores on maladaptive perfectionism, adaptive perfectionism, and procrastination, DASS and self-esteem were entered. Maladaptive perfectionism emerged as a significant predictor of distress accounting for nearly 32% of the variance in scores on DASS total (R2= 0.320, P<0.001). High maladaptive

Table 3. Associations between procrastination perfectionism, and self-esteem and distress (N=192)

Measure	Depression	Anxiety	Stress	DASS (total)	Self Esteem
FMPS	.452**	.509**	.428**	.531**	-.530
CM	.441**	.463**	.408**	.500**	-.495**
PS	.154*	.247**	.180*	.222**	-.164*
PE	.306**	.332**	.276**	.348**	-.353**
PC	.275**	.320**	.280**	.336**	-.423**
DOA	.461**	.482**	.407**	.502**	-.512**
O	.010	.111	.051	.063	.039
AP	.101	.213**	.139	.172*	-.080
MP	.496**	.533**	.458**	.569**	-.588**
Procrastination	.142	.019	.139	.105	.212*

Significance (2 tailed) *P<.05, **P<.001 Note: FMPS= Frost Multidimensional Perfectionism Scale; CM= Concern over Mistakes; PE= Parental Expectation; PC=Parental Criticism; DOA= Doubts over action; O=Organization; AP=Adaptive Perfectionism; MP= Maladaptive Perfectionism; DASS=Depression, Anxiety and Stress Scale

perfectionism also predicted lower self esteem, accounting for nearly 34% of scores on self esteem (R2 =0. 343, P<0.0001). Procrastination did not significantly predict distress or self-esteem in the present study.

Discussion

We examined procrastination, perfectionism, coping and their relationship with distress and self-esteem in college students. The sample's results of procrastination, is comparable to the samples from other studies on college students (Gohil, 2014; Steel 2010) and is marginally lower than the mean scores reported by the author. Nearly 50% of students report procrastination as being problematic (Stead, Shanahan, & Neufeld, 2010). Indian studies on procrastination suggest that procrastination is a frequently reported problem that hampers task completion and the daily routine of the student (Manikandan & Sebin, 2013).

The scores on measures of perfectionism in the present sample are consistent with the findings in community samples and lower than those reported by persons with anxiety disorders (Kumari et al., 2012; Ram, 2005). Personal standards, concern over mistakes, neatness and order were reported as being important.

The classification of perfectionism into maladaptive perfectionism and adaptive have been considered by a few recent researchers (Chang et al., 2004; Rice, Ashby, & Slaney, 1998) therefore, further comparison with our findings are difficult. However, the overall findings on the dimensions of perfectionism are in line with the literature.

As the sample consisted of students, our findings may be interpreted keeping in mind the importance of organization and personal standards in a student's routine. Organization is important in accomplishing goals and can act as a buffer against stress, particularly in meeting academic deadlines and pressure.

Participants did not report significant distress at the time of assessment. However, stress was higher than anxiety and depression. One possible explanation for lower scores could be the time of assessments, as students were not likely to be experiencing any academic deadline or examination.

Associations among procrastination, perfectionism and coping

The adaptive dimensions of perfectionism (personal standards and organization) were negatively associated with procrastination. Thus, higher levels of order, task organization and setting high, yet realistic standards are associated with reduced task delay. High personal standards have been positively associated with frequent study behaviour and reduced procrastination. On the other hand, fears of failure, task aversiveness are important components of procrastination (Solomon & Rothblum, 1984).

Task aversiveness is a major reason for engaging in procrastination and is negatively correlated with personal standards (Frost et al., 1990). Students who are above average in their academics are reported to procrastinate less frequently (Blackler, 2011; Lakshminarayan et al., 2011). Adaptive perfectionism is associated with positive outcomes including higher performance in examination and endurance (Bieling, Israeli, Smith, & Antony, 2003; Chang et al., 2004). Organization is an important self-regulatory mechanism that can reduce procrastination by goal setting or automatic habits (Locke & Latham, 1990).

Maladaptive perfectionism was not significantly associated with procrastination, and only doubts over one's actions were positively associated with procrastination. Thus, people who are excessively worried about failures tend to doubt their actions and engage in greater checking and may delay tasks (Flett, Hewitt, Blankstein & Mosher, 1995). Our findings are in line with literature and highlight the need to consider perfectionism as being multidimensional.

Research on the association between procrastination and perfection has yielded inconclusive results (Rice et al., 2012; Solomon & Rothblum, 1984). There is a need for further research on studies that address the various dimensions of procrastination and perfectionism.

Procrastination was not significantly associated with coping. Burns et al., (2000) report that academic procrastination differs from trait procrastination and that procrastination

can be seen as an emotion focused response, not necessarily maladaptive. Students may delay taking action until till they are confident of achieving their goals, particularly when they are not sure of the task or there is ambiguity. However, these findings need further examination.

Perfectionism and its dimensions were significantly associated with both problem focused and avoidant focused coping styles. Adaptive perfectionists report greater use of problem-focused coping (Rice & Lapsley, 2001). The organizational features of adaptive perfectionism are similar to planning and active coping strategies as reported in a study on Indian students (Slaney, Chadha, Mobely, & Kennedy, 2000).

We found that greater use of avoidant coping pattern was significantly associated with maladaptive perfectionism. Avoidant coping patterns may include denial, self-distraction, and result from the realization that one's high standards are difficult to attain, along with self-criticism, self-doubt and dissatisfaction (Burns & Fedewa, 2005). Concern over mistakes and doubts over actions have been related to worry and avoidance in some studies (Burns et al., 2000; Soenens et al., 2005). Coping effectiveness is predictive of psychological wellness and acts as a buffer for anxiety and depression (McCarthy et al., 2006).

Associations among procrastination, perfectionism, distress and self-esteem

We examined the association between procrastination, perfectionism, distress and self-esteem. Indian students report that procrastination is negatively associated with maintaining academics and daily routines (Lakshminarayan, et al., 2011; Manikandan & Sebin, 2013) and this has been established by western studies as well.

In the present study, procrastination was not associated with distress. The association between procrastination and distress has yielded mixed results (Kilbert, Langhinrichsen-Rohling, Luna & Robichaux 2011). Some studies report that in comparison to non-procrastinators, procrastinators experience less stress and have better physical health when deadlines are not close (Rice et al., 2012; Tice & Baumeister, 1997). Procrastination can possibly be viewed as a strategy used to regulate negative emotions. Thus, making the people feel better at least temporarily and not all delays lead to unconstructive outcomes (Gohil, 2014). Differences amongst procrastinators may also help explain the finding that procrastination is not always associated with distress (Chu & Choi, 2005, Lay, 1987).

Being consistent with the literature higher procrastination was associated with lower self esteem. Procrastinators have been reported to experience negative emotions such as shame and guilt, which also contributes to lower self esteem (Fee & Tangney, 2000; Tice & Baumeister, 1997). Task delays and postponement is a significant problem across ages such as school students and professionals faced with task demands and deadlines. These findings indicate the importance of addressing procrastination amongst students and youth.

Our findings indicate a significant association between maladaptive perfectionism and distress but, not with adaptive perfectionism (Flett & Hewitt, 2002). Rice, Ashby and Slaney, (1998) found that while maladaptive perfectionism is associated with depression, the association between adaptive perfectionism and depression is mixed. Adaptive perfectionists strive for higher standards without self-criticality and the ability to strive for mastery of goals is pleasurable for them. This is likely to lower chances of depression (Chang et al., 2004).

Greater maladaptive perfectionism was associated with a lower self-esteem. However, there was no significant association between adaptive perfectionism and self-esteem. Self-esteem is shaped by significant others and the society. High self-esteem refers to a highly favourable global evaluation of the self. Perfectionists are focused on perfection of the self and negative feedback from others will be interpreted as a problem in their ideal self, lowering self-esteem (Rice et al., 1998). Unrealistic standards can potentially lower self-esteem.

Predictors of distress and self-esteem

Maladaptive perfectionism emerged as a predictor of distress (DASS total) and lower

self-esteem. These findings have significant implications for how students experience distress with respect to academic pressures and are unable to meet them on time. Maladaptive perfectionism has been linked to poorer mental health particularly when high standards are set inflexibly (Flett & Hewitt, 2002).

Gender differences

Female participants reported higher parental expectations and a higher use of avoidant focused coping than males. Studies on coping document show use of different strategies of coping across gender and suggest that females employ emotion-focused and avoidant styles more frequently than males (Park, Heppner, & Lee, 2010).

The present study assessed both adaptive and maladaptive dimensions of perfectionism. Studies support the presence of maladaptive perfectionism in clinical populations (Kumari et al., 2012). However, there has been little research on adaptive perfectionism.

Limitations

The study included a predominantly urban sample with an over representation of females. A cross sectional design did not permit examination of the stability of these variables over time. A qualitative approach would have enriched the study of terms of coping. A screening measure for psychological caseness would have enhanced the sample selection.

Conclusion

Maladaptive perfectionism was significantly associated with distress and lower self- esteem, while adaptive perfectionism was associated with lower procrastination. Our findings highlight the need for interventions that focus on adaptive perfectionism to enhance self-esteem and reduce maladaptive aspects of perfectionism. Although, procrastination appears to reduce distress temporarily, it lowers self esteem when used extensively. It is important to target procrastination in vulnerable populations such as students and enhance adaptive ways of coping with it.

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