



ROLE OF COPING IN HEALTH AMONG COLLEGE STUDENTS

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ABSTRACT

The coping strategies play a significant role in student's health. This study examines the role of coping strategies in health in a sample of 219 Kashmiri college students (male = 52.10 receiving higher education. Coping strategies were evaluated by means of the ways of coping (Folkman & Lazarus, 1985), while health was assessed using the general health questionnaire (Goldberg & Hillier, 1979). The results show a relationship between coping style and health. The findings of the study % female = 47.90%; mean age = 23.30 years, SD = 1.70) who migrated to Bhopal, India for revealed that focus on the positive, detachment, wishful thinking and self-blame coping were found significant predictors of health for students. Implications of present findings for student's health are discussed.

KEY WORDS : Coping, Health, Kashmiri students**Introduction**

There is extensive literature which demonstrated effects of coping on health in many populations. With some exceptions, problem-focused coping strategies, such as seeking information and taking action, lead to positive health outcomes; other types of coping strategies, such as avoidance and confrontive coping, lead to negative health outcomes [1]. However, a nascent and much smaller literature addresses whether coping influences health in migrant students population. Results from studies of coping's effect on health in migrant students vary depending upon how coping and health are conceptualized [2]. This study reviews the recent literature on coping and health in migrant student population.

An examination of coping's influence on health must be prefaced with a brief discussion of the concept of coping. Coping refers to "cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" [3]. There are two main strategies of coping i.e., problem focused coping and emotional focused coping. Problem-focused coping include plans of action, such as trying to solve the core problem, or using strategies to avoid or eliminate the problem [4-5]. Emotion-focused coping, on the other hand, refers to seeking emotional support, denial strategies or avoidant strategies, such as distracting oneself with activities to take the mind of the stressor [6], where one tries to alter the situation that is causing the stressor (e.g., exiting an unhealthy relationship) or preventing the stressor from recurring, and emotion-focused coping, where one alters their reactions to and feelings regarding the stressor, such as finding the humor in the situation [7]. Most studies demonstrated that problem- focused tactics are more effective than emotion-focused coping in combating with stress. Problem-focused strategies are associated with lower levels of psychological disorders, whereas emotion-focused strategies are related to higher levels of distress and hopelessness [8]. However, emotion focused coping may be particularly effective when the stressor cannot be altered, and in the immediate aftermath of the stressor [9]. Effective coping strategies can also help people expand their boundaries and test their limits. Even though this may affect the stress level, the challenge will increase the level of life satisfaction. On the other hand, ineffective coping may result in lowered health [6].

Studies published to date confirm that coping is a key variable in the process of reducing, minimizing or tolerating stress, since the use of

inadequate coping strategies may maintain or accentuate psychological distress and affect the student general health. So, the objective of this investigation is to explore the relation existing between the dimensions that are included in coping strategies and the health of the students, hypothesizing coping behavior of the participants will significantly predict their health.

**Method
Participants**

The participants of the present study were 219 Kashmiri students (114 males and 105 females) studying in different universities and colleges located in Bhopal city, Central India. In recent years a large number of students from Kashmir have migrated to Bhopal for receiving higher education. These students were enrolled as graduate and post-graduate students in different colleges and universities of Bhopal. The participants of the present study were randomly drawn from different educational institutions. The age of these participants ranged from 20 to 30 years (Mean = 23.30, SD = 1.70). The majority of the participants (49.30%) had less than one year of living experience in Bhopal while 35.60% were living in Bhopal from 1 to 2 years. The percentage of the participants living in Bhopal from 2 to 3 years was 15.10.

Measures

General Health Questionnaire. Self-reported health was assessed with the help of General Health Questionnaire [10], a self administered screening instrument which focuses on the psychological components of ill-health. This measure was developed to detect psychiatric disorders among people in community setting and non psychiatric clinical setting. This 28-item scale has four factors i.e., somatic symptoms (item 1 to 7), anxiety and insomnia (item 8 to 14), social dysfunction (item 15 to 21), and severe depression (item 22 to 28), which provide a state measure of psychological distress. Responses are obtained on a 4-point Likert scale ranging from 0 (better than usual) to 3 (worse than usual). Total score is produced by adding each subscale scores together that ranges from 0 to 28. A high score on this measure indicates greater psychological distress. Goldberg and William [11] have reported split-half reliability for the total scale as 0.95. Internal consistency reliability (Cronbach's alpha) of this measure in the present study was found as 0.93.

Ways of Coping Questionnaire. The 42 item revised Ways of Coping

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Questionnaire (student version) developed by Folkman and Lazarus [12] consists of eight scales or coping strategies i.e., problem-focused coping, wishful thinking, detachment, seeking social support, focus on the positive, self-blame, tension reduction and self-isolation. A 4-point Likert scale ranging from "0" (not used) to "3" (used a great deal) is used. The score for each of the coping strategies are derived by adding the scores of the items belongs to each subscale. Folkman and Lazarus [12] has reported internal consistency for student sample (Cronbach's $\alpha = 0.59-0.88$). In the present study, internal consistency reliability (Cronbach's alpha) of different subscales of Ways of Coping were 0.84 (problem-focused coping), 0.83 (wishful thinking), 0.70 (detachment), 0.78 (seeking social support), 0.67 (focus on the positive), 0.72 (self-blame), 0.58 (tension reduction) and 0.60 (self-isolation).

Procedure

The questionnaire used in the present study included demographic information sheet, General Health Questionnaire, and Ways of Coping Questionnaire. After seeking required permission from concerned colleges and university authorities, the participants were personally contacted. They were briefed about the purpose of research and questionnaire used in the study. After seeking consent of the student a suitable time and date was fixed for data collection.

Before administering the questionnaire, the purpose of the study was again explained to the participants and they were assured that their responses will be kept confidential and will be used only for research and academic purpose only. A good rapport was built with the participants for getting correct responses. Some necessary instruction and guidelines were provided to them for properly filling the questionnaire. After this, the questionnaires were provided to them and they were requested to fill-up the questionnaire as per the instructions given in the questionnaire. It took an average of 45 minutes for the participants to complete the questionnaire. After completion of the questionnaire participants returned the questionnaire and they were thanked for their participation and cooperation.

Statistical Analysis of Data

The data were first exported to Microsoft Excel and then to Statistical Package for Social Sciences (SPSS) computer software used for quantitative statistical analyses. Prior to analysis, all variables were screened for possible code. To test the study research hypotheses, descriptive (mean, standard deviation, percentage etc.), and multivariate statistical method were used. Stepwise multiple regression analysis was applied to examine the role of coping strategies adopted by the participants in predicting their health. For this, separate analysis was run for each aspect of general health.

Result

Role of Coping in Health

In order to examine whether coping strategies adopted by the participants predicted health of the participants, stepwise multiple regression analysis was applied separately for each aspect of general health. Result presented in Table 1 clearly indicate that while predicting somatic symptom from all the eight methods of coping only detachment coping ($\beta = .20, t = 3.07, p < .01$) could enter in the equation explaining 4% variance in the somatic symptom $R^2 = .04, F(1, 217) = 9.41, p < .01$. This indicates that participants using detachment as coping for acculturative stress reported significantly greater somatic symptom. None of the other coping methods was found predicting variance in the somatic symptom scores of the participants.

Detachment coping appeared as significant predictor of anxiety and insomnia ($\beta = .22, t = 3.28, p < .01$) which explained 5% variance in criterion variable $R^2 = .05, F(1, 217) = 10.74, p < .01$. At step 2, wishful thinking coping entered in the equation which significantly predicted change in the scores on anxiety and insomnia ($\beta = .14, t = 2.10, p < .05$). Thus, this variable explained 2% variance in the

criterion variable and the two variables jointly explained 7% variance in the scores on the dependent measure which was statistically significant $R^2 = .07, F(1, 217) = 7.66, p < .01$. At step 3, the variable of focus on the positive coping significantly

Table 1
Result of Stepwise Multiple Regression to predict General Health from Methods of Coping

Criterion variables	Predictors	R ²	F(1, 217)	b	SE-b	β	t	95% CI
Somatic symptom	DT	.04	9.41**	2.00	.65	.20	3.07**	0.72 – 3.29
	WT							
Anxiety and insomnia	DT	.05	10.74**	2.10	.64	.22	3.28**	0.84 – 3.36
	DT	.07	7.66**	1.68	.67	.17	2.52**	0.36 – 2.99
	WT			1.17	.56	.14	2.10*	0.07 – 2.27
	DT	.09	6.71**	2.15	.70	.22	3.09**	0.78 – 3.53
	WT			1.30	.56	.16	2.34*	0.21 – 2.40
Social dysfunction	FP			-1.22	.57	-.15	-2.13*	-2.35 – -0.09
	FP	.07	16.09**	-1.70	.42	-.26	-4.01**	-2.54 – -0.87
	FP	.11	12.75**	-1.80	.42	-.28	-4.30**	-2.62 – -0.97
	SB			1.02	.34	.19	2.97**	0.34 – 1.69
	FP	.12	10.09**	-2.13	.44	-.33	-4.79**	-3.00 – -1.25
Severe depression	SB			.08	.36	.15	2.24*	0.09 – 1.50
	DT			1.15	.55	.15	2.09*	0.06 – 2.24
	DT	.03	6.76**	1.76	.68	.17	2.60**	0.43 – 3.10
Overall General health	DT	.04	10.00**	1.61	.51	.21	3.16**	0.61 – 2.62
	DT	.07	8.36**	2.11	.54	.27	3.90**	1.04 – 3.17
	FP			-1.16	.46	-.18	-2.54**	-2.06 – -0.26

* $p < .05$. ** $p < .01$.
DT = Detachment; WT = Wishful thinking; FP = Focus on the positive; SB = Self-blame.

predicted change in the scores on anxiety and insomnia ($\beta = -.15, t = -2.13, p < .05$) again explaining 2% variance in the dependent measure and these three variables jointly explained 9% variance in the scores on anxiety and insomnia, $R^2 = .09, F(1, 217) = 6.71, p < .01$. Positive relationship of detachment coping and wishful thinking with anxiety and insomnia indicate that with increasing use of detachment and wishful thinking coping anxiety and insomnia increases significantly, whereas negative relationship of focus on the positive to anxiety and insomnia was related to decrease in anxiety and insomnia.

While predicting social dysfunction from scores on various coping strategies, at step 1, focus on the positive coping was found as significant predictor of social dysfunction ($\beta = -.26, t = -4.01, p < .01$), which accounted for 7% variance in the scores on criterion variable $R^2 = .07, F(1, 217) = 16.09, p < .01$. At step 2, when self-blame coping was entered in the equation it significantly predicted change in the scores on social dysfunction ($\beta = .19, t = 2.97, p < .01$) explaining 4% variance in dependent measure. Both these variables jointly explained 11% variance in the score on social dysfunction which was significant $R^2 = .11, F(1, 217) = 12.75, p < .01$. At step 3, the variable of detachment coping entered in the equation which significantly predicted change in the scores on social dysfunction ($\beta = .15, t = 2.09, p < .05$), however, it could explain only 1% variance in the criterion variable. These three variables jointly explained 12% variance in the score on dependent measure $R^2 = .12, F(1, 217) = 10.09, p < .01$. Result revealed that focus on the positive coping was negatively related to social dysfunction, this mean that with increasing focus on the positive coping social dysfunction decreases significantly, whereas self-blame and detachment coping was positively related to social dysfunction indicating an increasing use of self-blame and detachment coping significantly.

When predicting severe depression from all eight coping strategies, only detachment coping ($\beta = .17$, $t = 2.60$, $p < .01$) was found significant predictor of severe depression which explained 3% variance in dependent measure $R^2 = .03$, $F(1, 217) = 6.76$, $p < .01$. This shows that student using detachment coping reported more severe depression. None of the other coping strategies was found predicting variance in the scores on severe depression of the participants. Finally, when predicting overall general health from scores on different coping methods, it was observed that at step 1, detachment coping significantly predicted overall general health ($\beta = .21$, $t = 3.16$, $p < .01$) accounting for 4% variance in the scores on dependent measure $R^2 = .04$, $F(1, 217) = 10.00$, $p < .01$. At step 2, when focus on the positive coping entered in the equation it significantly predicted change in the score on criterion variable ($\beta = -.18$, $t = -2.54$, $p < .01$). Although this variable accounted for only 3% variance in the scores on criterion variable, both variable jointly explained 7% variance in the score on overall general health $R^2 = .07$, $F(1, 217) = 8.36$, $p < .01$. These result clearly revealed that increasing use of detachment coping strategy was related to decrease overall general health of the participants whereas greater use of focus on the positive improved general health of the participants.

Discussion

Present study examined role of coping strategies adopted by the students in their health. It was hypothesized that coping methods adopted by students will significantly predict their health. Results of stepwise multiple regression analysis revealed different coping methods as significant predictors of scores on the measure of health where focus on the positive coping was found negatively and significantly related to different measures of health. This shows that participants who used focus on the positive as coping method showed better health while participants adopting coping methods such as detachment, wishful thinking and self-blame coping showed poor health. These findings clearly supported the hypothesis that coping methods determine the health of the students.

Although previous studies have shown problem-focused coping consistently associated with better health [7-8, 13-21] whereas emotional-focused coping has been associated with poor health [20]. Present findings fully support the relationship of problem-focused coping observed in above studies. However, problem-focused coping appears to be effective simply because it removes daily stressors. Although daily stressors are only small they have been associated with lowered mood in university students [22]. Perhaps more significantly, daily stressors can develop into major stresses, thus increasing the potential for increased stress, anxiety and depression [23]. The removal of these stressors therefore decreases the likelihood of experiencing distress. In addition, problem-focused coping may be negatively associated with psychological distress as it requires individuals to set and accomplish goals. As a consequence individuals are provided with a sense of mastery and control, thus reducing their anxiety and stress [24].

In the present study emotion-focused coping methods (i.e., detachment, wishful thing and self-blame) have been found more direct and significant predictors of health. Emotion-focused coping incorporates a number of diverse coping styles that have been shown to be both adaptive and maladaptive [8, 14, 19, 21, 25]. In general, the coping strategies that focus on negative emotions and thoughts appear to increase psychological distress (e.g. venting of emotions and rumination), whereas coping strategies that regulate emotion (e.g. seeking social support, affect regulation and acceptance) appear to reduce distress. Emotion-focused coping appears to vary in its effectiveness as it incorporates a number of diverse coping styles. Coping styles that regulate emotion are effective as they prevent people from dwelling on their negative emotions and ensure they take proactive steps to resolve their negative emotions [7]. For example, seeking social support is

effective as it encourages students to seek advice from others regarding suitable coping strategies in which to engage [14]. The present study suffered from a number of limitations. Self report measures were used with participants, and relied on single informants as source of data. The convenience sampling method of Kashmiri students is not likely to be representative of all Kashmiri students studying in other parts of the country. The cross-sectional design used in the present study does not allow drawing conclusions regarding causality. Longitudinal research will be needed to support such conclusions. A correlational design was utilized in this study given the non-experimental nature of the variables that were included.

Despite the above limitations, the present investigation contributes substantially and uniquely to research on coping and health of students. Findings from this study have broadened our understanding of coping strategies and its role in health of migrant students in the context of within country migration. These findings have important implications for professionals in research, health care practice and education.

In a large and culturally diverse country like India, it is surprising that no attention has been afforded to within country migration of students. The present study has taken an important step in attempting to examine the relationship of coping strategies to health among Kashmiri students in Bhopal who belong to a different eco-cultural background. It is important that further research be conducted with students who migrate to study in other parts of the country.

From an intervention point of view, current findings suggest that professionals who work with migrant students should be culturally competent and sensitive by becoming familiar with the students' cultural expectations and experiences. By doing so, professionals can be able to develop and implement culturally sensitive programs that not only identify at risk students but also offer a positive academic and social environment that facilitates cross-cultural skills.

The findings of the present study could also be utilized by the educators. As the number of migrant students in higher education classes increases, professors and host students face the need to examine their assumptions about the teaching and learning process. Therefore, it is important for the faculty as well as host students to be aware of the cross-cultural differences surrounding migrant students' academic adjustments. The cultural diversity that migrant students bring into the academic arena should be used as an opportunity for facilitating teaching and learning.

The findings from the current study have significant implications for future direction. Existing literature in the field of coping and health shows that still there are many areas that need to be examined. Student coping and its effects on their health is one important area. For example, there are many Kashmiri students all over the India experiencing stress. Therefore, coping strategies need to be explored in more detail, and the pattern of results observed in the current study should be examined and tested with different groups in different states of the country. Thus, the factors affecting Kashmiri students' health should be identified in detail. In terms of measurement, in-depth interviews can encourage migrant students to share more information about their experiences. Researchers may also have chance to observe individuals' non-verbal language. Adding such qualitative elements can enrich the assessment.

Present findings also suggest a need for developing culturally effective outreach and intervention programs for Kashmiri students. Further research is needed to develop culture-centered and culture-specific health promotion strategies and to explore their effectiveness, as to better serve the other subgroups (i.e., traders, employees etc.) including migrant students of Kashmiri culture in order to improve their health and psychological well-being.

Finally, longitudinal studies may be another recommended research direction to study coping strategies, health and psychological well-being of students over time. Longitudinal studies can provide a broader picture of adaptation process. Migrant students' experiences can be explored more realistically from the beginning of their arrival. Also coping strategies need to be examined in detail which can be possible only through well designed longitudinal studies.

In conclusion, this study sought to determine the relationships between coping and health of Kashmiri students. Although several limitations were found regarding the empirical analyses of data of the present study, the investigator was able to generate a more thorough understanding of the role of coping in health in the context of within country acculturation of a minority group of students who are culturally different from student populations of other parts of the country.

References

1. Penley J. A., Tomaka J, Wiebe J. S. (2002). The association of coping to physical and psychological health outcomes: a meta-analytic review. *Journal of Behavioral Medicine*, 25, 551–603.
2. Aldwin, C. M, Yancura, L. A, Boeninger, D. K. (2007). Coping, health, and aging. In *Handbook of Health Psychology and Aging*. Edited by Aldwin CM, Park CL, Spiro A III. New York: Guilford Press, 210–226.
3. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer Publishing.
4. Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55, 745–774. doi:10.1146/annurev.psych.55.090902.141456
5. MacCann, C., Lipnevich, A. A., Burrus, J., & Roberts, R. D. (2012). The best years of our lives? Coping with stress predicts school grades, life satisfaction, and feelings about high school. *Learning and Individual Differences*, 235–241.
6. Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology* (61), 679–704.
7. Carver, C., Scheier, M., & Weintraub, J. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267–283.
8. Billings, A. G., & Moos, R. H. (1981). The role of coping resources in attenuating the stress of life events. *Journal of Behavioral Medicine*, 7, 139–157.
9. Reynolds, P., Hurley, S., Torres, M., Jackson, J., Boyd, P., & Chen, V. W. (2000). Use of coping strategies and breast cancer survival: Results from the Black/White cancer survival study. *American Journal of Epidemiology*, 152, 940–949.
10. Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9, 139–145.
11. Goldberg, D., & Williams, P. (1988). *A user's guide to the general health questionnaire*. Windsor, Berkshire, U.K: NFER-Nelson.
12. Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48, 150–170.
13. Blake, R., & Vandiver, T. (1988). The association of health with stressful life changes, social supports, and coping. *Family Practice Research Journal*, 7, 205–218.
14. Bouteyre, E., Maurel, M., & Bernaud, J. L. (2007). Daily hassles and depressive symptoms among first year psychology students in France: The role of coping and social support. *Journal of the International Society for the Investigation of Stress*, 23(2), 93–99.
15. Cervantes, R. C., & Castro, F. G. (1985). Stress, coping and Mexican American mental health: A systematic review. *Hispanic Journal of Behavioral Science*, 7, 1–73.
16. Knibb, R. C., & Horton, S. L. (2008). Can illness perceptions and coping predict psychological distress amongst allergy sufferers? *British Journal of Health Psychology*, 13(1), 103–119.
17. Parkes, K. (1990). Coping, negative affectivity, and the work environment: Additive and interactive predictors of mental health. *Journal of Applied Psychology*, 75, 399–409.
18. Sherbourne, C., Hays, R., & Wells, K. (1995). Personal and psychosocial risk factors for physical and mental health outcomes and course of depression among depressed patients. *Journal of Clinical Psychology*, 63, 345–355.
19. Penland, E., Masten, W., Zelhart, P., Fournet, G., & Callahan, T. (2000). Possible selves, depression, and coping skills in university students. *Journal of Personality and Individual Differences*, 29, 963–969.
20. Smari, J., & Valtysdottir, H. (1997). Dispositional coping, psychological distress, and disease control in diabetes. *Personality Individual Difference*, 22, 151–156.
21. Wijndaele, K., Matton, L., Duvigneaud, N., Lefevre, J., De Bourdeaudhuij, I., & Duquet, W. (2007). Association between leisure time physical activity and stress, social support and coping: A cluster-analytical approach. *Psychology of Sport and Exercise*, 8(4), 425–440.
22. Wolf, T. M., Elston, R. C., & Kissling, G. E. (1989). Relationship of hassles, uplifts, and life events to psychological well-being of freshman medical students. *Behavioral Medicine*, 15(1), 37–45.
23. Holahan, C. J., Holahan, C. K., Moos, R. H., Brennan, P. L., & Schutte, K. K. (2005). Stress generation, avoidance coping, and depressive symptoms: A 10-Year Model. *Journal of Consulting and Clinical Psychology*, 73(4), 658–666.
24. Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science & Medicine*, 45(8), 1207–1221.
25. Crockett, L. J., Iturbide, M. I., Torres, R. A., McGinley, M., Raffaelli, M., & Carlo, G. (2007). Acculturative stress, social support, and coping: Relations to psychological adjustment among Mexican American college students. *Cultural Diversity and Ethnic Minority Psychology*, 13(4), 347–355.