

The Resilience of Buddhist College Students

Nho Eun Kim

Abstract

College students, who psychologically belong to both the adolescent period and the early adult period, are in a transitional period and could be under increased stress due to the delay of independence and feelings of being “in-between.” This could create problems in adaptation. In the process of adaptation, many factors, including stress, social support, and resilience are interconnected. The purpose of this study is to examine Buddhist college students’ stress, social support, and resilience and evaluate the mediating effect of social support between stress and resilience. Fifty-one Buddhist college students completed a demographic questionnaire, a stress questionnaire, a social support questionnaire, and a resilience questionnaire. Data was analyzed using the SPSS 19.0 program which includes frequency analysis, descriptive analysis, correlation analysis, and regression analysis. The mediating effect of resilience was analyzed using the method suggested by Baron and Kenny (1986) and the Sobel equation. The results showed the level of Buddhist college students’ resilience was relatively fair. Regression analysis showed that stress and social support directly affected the resilience level of

Nho Eun Kim is a lecturer at the Graduate School of Buddhist Studies, Dongguk Univ. (Seoul).
(bykim98@daum.net)

International Journal of Buddhist Thought & Culture September 2012, vol. 19, pp. 145-171.

© 2012 International Association for Buddhist Thought & Culture

The day of submission: 2012.6.12 / Completion of review: 2012.8.4 / Final decision for acceptance: 2012.8.28

students and that stress also affects their resilience indirectly through the partially mediating factor of social support. Social support was revealed to be somewhat of a defense mechanism against stress, which negatively affects resilience.

The results of this study indicated that stress negatively affect the resilience of Buddhist college students, but social support offsets this by mediating the effects of stress on resilience. It is essential to develop some measures to ease Buddhist college students' stress and to improve their social support in order to enhance resilience using the strengths of Buddhism as stress is a form of suffering, or what Buddhists refer to as "dukkha."

Key words: Buddhist College Students, *Dukkha*, Resilience, Social Support, Stress.

I. Introduction

A. Background and Purpose of This Study

Recently, the social issue about college students has been emerging in Korea including a succession of college students' suicides and demonstrations to lower college tuition cuts. Some scholars classify college students as adolescents and others as young adults. As college students face increased challenges in this transitional period, thereby experiencing more stress, it is necessary for society to be more concerned about their problems and make an effort to help them.

The 2005 population census taken by the Korean National Statistical Office revealed that the Buddhist population in Korea is about 10.72 million people. This represents 23% of the total Korean population and 43% of the population who claim a religious preference (Statistics Korea 2006). Although this is below the estimates of the Buddhist religious body, it is a higher rate than those claiming other religions. Because the censuses after that time did not disclose people's religions, we can not guess the trend of the distribution

of each religion. However, looking at the 2005 population census, we can see that the percentage of Buddhist followers decreases with decreasing age, and it reaches 19.7% in the age of 20 to 24, the ages of many college students (Statistics Korea 2006). These results reveal that Buddhist society should be concerned about the future of Buddhism in Korea. Especially, we need to be concerned about college students who are active in religious activities. With this background, this study will examine the relationship between stress, social support, which is known as a protective factor against stress, and resilience in Buddhist college students.

The “Korean Adolescence Basic Acts” define an adolescent as a person between 9 and 24 years of age (National Law Information Center 2012). From a developmental psychologic perspective, college students belong to both late adolescence and early adulthood. This transitional period is one of the most confusing periods in one’s lifetime. As current society requires higher education to get a job, it takes more time to achieve financial independence. In light of these phenomenon, Arnett (2000, 469) proposed a new developmental period. Arnett postulated that in modern industrial societies there is a distinct transitional period between adolescence and adulthood (roughly ages 18 through 25). The term he coined for this period was “*emerging adulthood*,” and he proposed five defining characteristics for it: identity exploration, instability, self-focus, feeling in-between, and experiencing a range of possibilities. As “emerging adults,” college students, representing emerging adulthood, could face various problems of adaptation and could experience great stress (Dungan 2001, 86). Issues in “emerging adulthood” include cognitive development, identity formation, ethnic identity, psychological disorders, resilience, family relationships, friendships and romance, sexuality, education and employment, and media use (Arnett and Tanner 2005, 306–23). Maladaptation to these stresses could have negative results.

However, stress can enhance personal activity. Because stress is a result of the interaction between a person and his environment rather than a simple response of a person (Lazarus and Folkman 1984, 21), individual level of stress or maladaptation to similar situations varies from individual to individual

according to their physical, psychological, and social resources. These differences can be understood in light of various factors. Two of those protective factors, which buffer against stress and enhance adaptation, are social support (Cohen and Hoberman 1983, 99) and personal resilience (Masten, Best, and Garmezy 1990, 425).

Social support is a multidimensional concept that includes the support actually received (informative, emotional, and instrumental) and the sources of the support (friends, family, strangers, and animals) (Dumont and Provost 1999, 345). These supportive resources can be emotional (e.g., nurturance), tangible (e.g., financial assistance), informational (e.g., advice), or interpersonal (e.g., sense of belonging) (Heitzmann and Kaplan 1988, 75). Previous research has found that high levels of social support lead to lower levels of depression and anxiety (Zimet, Dahlem, Zimet, and Farley 1988, 30), making social support crucial to one's development and adjustment so that they may enjoy a successful and rewarding college life.

Resilience refers to a dynamic process encompassing positive adaptation within the context of significant adversity (Luthar, Cicchetti, and Becker 2000, 543-44). Two critical conditions are included within this concept: (1) exposure to a significant threat or severe adversity; and (2) the achievement of positive adaptation despite major assaults on the developmental process (Masten, Best, and Garmezy 1990, 425; Rutter 1985, 598). Such adaptation may result in the individual bouncing back from stressful experiences. Resilience is a dynamic process involving the interaction between adversity and a protective process. It is a protective factor that causes one to modify the adverse effects of a negative life event (Rutter 1985, 598).

Resilience has been studied for over 20 years, yet there are still few studies about the relationship between stress, social support, and resilience of college students. If stress and social support affect the resilience of college students and if social support is a mediating factor between stress and resilience, then relieving stress and improving social support would be an effective way to enhance the resilience of college students. So, a study that clarifies the relationship between these three factors and how they affect

college students is required.

Meanwhile, the concept of “*Dukkha*” (Sanskrit: “*duhkha*” or “suffering”) originates with Buddha’s “First Noble Truth” (苦聖諦) and is one of the three characteristics of human existence, those being: impermanence (*anicca*), dissatisfaction (*dukkha*) and egolessness (*anatta*) (Gnanarama 2000, 21). *Dukkha* is similar to stress in its concept (Tyson and Pongruengphant 2007, 352) and often translated as suffering or dissatisfaction. Buddhists consider stress a form of *dukkha* because *dukkha* includes both physical suffering and mental suffering, both of which eventually cause stress. There have been many psychological tools designed to measure degrees of stress but none to measure *dukkha*. Just as Buddha taught the path to the cessation of *dukkha* (suffering) in the “Noble Eightfold Path” (八正道), Buddhist college students could eliminate or reduce their suffering or stress if they understood and devoted themselves to practice the Buddha’s teachings through meditation or other Buddhist practices. Therefore, we need to examine how much stress Buddhist college students experience.

Therefore, this study will examine Buddhist college students’ stress, social support, and resilience and evaluate the mediating effect of social support between stress and resilience, the goal being to see whether improving social support would be an effective way to enhance the resilience of college students.

B. Research Questions

The following research questions were assessed: (1) To what extent do Buddhist college students perceive stress and social support, and what is their level of resilience? (2) What is the relationship among stress, social support, and resilience in Buddhist college students? (3) What are the affecting factors on resilience of Buddhist college students out of stress and social support? (4) Does social support mediate the relationship between stress and resilience in Buddhist college students?

II. Literature Review

A. Stress in College Students

College students frequently experience stressful situations (Dungan 2001, 86). Most first-year undergraduates are living apart from their parents for the first time in their lives. More senior undergraduates face continuing pressure for academic performance as well as difficult career choices and job search issues. Stress is a major issue for college students as they cope with a variety of academic, social, and personal challenges (Dungan 2001, 86). Some college students actively cope with stressful situations while others become victims of their situations. I am interested in exploring the factors that lead college students to actively cope with stressful situations. Enhancing these factors may facilitate active coping strategies by college students.

In annual surveys conducted between 1985 and 1995, increasing proportions of students reported feeling overwhelmed (Sax 1997, 252). In 2004, stress was the most commonly identified impediment to academic performance, cited by about one-third (32%) of nearly 50,000 students surveyed at 74 US campuses (American College Health Association 2006, 201).

Continual stress may lead students into unproductive rumination (Trapnell and Campbell 1999, 284) that consumes energy and compounds the experience of stress. Intensified stress can undermine resilience factors (Fergus and Zimmerman 2005, 403) and impede proper coping.

Although a certain level of stress may result in improved performance, too much stress can adversely affect physical and mental health (DeLongis, Folkman, and Lazarus 1988, 486; Fergus and Zimmermann 2005, 406; McEwen 1998, 171; Schneiderman, Ironson, and Siegel 2005, 607; Segrin 1999, 14). An important developmental task for college students is learning to manage excessive or unnecessary distress while actively engaging in healthy, age-appropriate challenges that promote growth.

Despite a multitude of social, academic, and emotional stressors, most

college students successfully cope with their complex new life role and achieve academic success. Other students are less able to successfully manage this transition. Until now, many factors affecting individual differences in responses to stress have been suggested, mostly internal personal factors, such as personality characteristics (Halamandaris and Power 1999, 665), resilience (Beasley, Thompson, and Davidson 2003, 77; Hess, Papas, and Black 2002, 619), self-esteem (Thoits 1995, 53), coping strategies (Lazarus and Folkman, 1984, 120–27), or external environmental factors such as social support (Cohen and Hoberman 1983, 99) and physical resources. Among those factors, personality characteristics, self-esteem, coping strategies, and social support have been studied actively in Korea, but there are not enough studies on resilience, especially on the relationship between resilience and social support.

B. Social Support

Cohen and Wills (1985, 310) have identified two major models to explain the protective roles of social support toward stress. The first model is the main effect model which posits that social supports positively influence health irrespective of whether one is experiencing stress or not. The second model is the stress-buffering effect which argues that social supports positively influence health and well-being by protecting people from the pathogenic effects of stressors. The stress-buffering effect has been studied extensively (Cohen and Hoberman, 1983, 99). This model supposes that adequate social support will offset or moderate the impact of stress on health.

The beneficial impact of social support has been associated with both physical and mental health outcomes. Greater levels of social support are associated with lower levels of depression, fewer episodes of negative life events, a more positive mood, and greater life satisfaction (Demakis and McAdams 1994, 235). The beneficial effects of social support also have been observed in youth (Cohen and Wills 1985, 310). In adolescents and young adults, low satisfaction with social support is associated with depressive or psychosomatic symptoms, anxiety, and interpersonal sensitivity (Compas et al.

1986, 205). Social support also affects resilience in adolescents (Jung and Lim, 2011, 37).

Within higher education settings like college, students receive social support from family, student friends, and faculty. Student perceptions of social support have also been positively associated with health-promoting behaviors such as exercise, good nutrition, and the avoidance of substance abuse (Martinelli 1999, 263) and the level of social support is high in the group of college students with a high level of resilience (Ahn and Kim 2007, 47). Conversely, research among college students suggests that withdrawing from social support correlates to negative life satisfaction (Mori 2000, 137). Social support in adolescents is known to have a buffering effect against emotional crises and/or stress (Kaplan, Robbins, and Martin 1983, 230) and preventive effects against maladaptation and behavioral problems (Cohen and Wills 1985, 310). In studies of college students, social support also proved to have a buffering effect against stress (Cohen and Hoberman 1983, 99).

C. Resilience

Resilience refers to a dynamic process encompassing positive adaptation within the context of significant adversity (Luthar, Cicchetti, and Becker 2000, 543-44) and can be characterized as a dynamic process involving factors that may mediate between an individual, his or her environment, and the outcome. Resilience is often associated with discussions about times of transition, disaster, or other periods of adversity.

Historically, the study of resilience began with children and researchers began to notice that some children were able to cope and survive despite adverse conditions (Masten, Best, and Garmezy 1990, 425). Children and adolescents experience risks and vulnerability differently depending on their developmental stages, and their resilience too could be different during these normative periods of life. Factors that protect individuals were also found to change during subsequent developmental stages. For example, parental caring during infancy is protective, while such parental behavior could possibly hinder

the healthy development of the adolescent (Rutter 1993, 627). There is a well-known longitudinal study which provided essential information about resilience as a result of the compounding effects of multiple risks. Children born in Kauai, Hawaii in 1955 were studied for over four decades. About 1/3 of these children were found to be resilient despite their risks such as poverty, family disorganization, and having parents with low education levels (Werner 1993, 505-8). These children have continued to be resilient adults. Other researchers have come to similar conclusions with their own longitudinal studies of at-risk youth.

Diverse factors explaining resilience have been suggested but, in general, can be divided into three categories: individual factors, family factors, and community or environmental factors (Luthar, Cicchetti, and Becker 2000, 543-44). In terms of the individual, Connor and Zhang (2006, 7-9) suggested there was a biological component to resilience, with the identification of a variety of neurotransmitters, neuropeptides, and hormones that work to either promote or undermine resilience. Levels of temperament and self-esteem have also been identified as determinants of resilience (Connor and Zhang 2006, 5; Croom and Proctor 2005, 113). In terms of the family, determinants of resilience could be the quality of the parent-child relationship, the support or lack thereof for education, and the condition of the marriage (Croom and Proctor 2005, 113-18). Within social environments, determinants of resilience could be the presence or absence of a strong role model and social status (Luthar, Cicchetti, and Becker 2000, 543-44).

Resilience has chiefly been studied in adolescents during times of great risk. In the studies of adolescent resilience, resilient adolescents tended not to be involved in high risk behaviors like smoking, drug abuse, crime, and violence (Rouse, Ingersoll, and Orr 1998, 297). Researchers have studied the effects of coping (Davey, Eaker, and Walters 2003, 347), social support (Hess, Papas, and Black 2002, 619), environmental risks (O'Donnell, Schwab-Stone, and Muyeed 2002, 1265), and culture (Arrington and Wilson 2000, 221). Although contradictory findings are evident (e.g., influence of social support), the majority of the researchers have concluded that protective factors and

resilience need to be enhanced in order to minimize stress and risk behaviors.

In studies of the resilience of college students, enhancing resilience showed positive results in coping with stress through flexibility and good impulse control (Beasley, Thompson, and Davidson 2003, 79; Li 2008, 312). In a sample of college students, resilience was positively related to task-oriented coping, or employing active, problem-focused behaviors to address stressors (Campbell-Sills, Cohan, and Stein 2006, 1007; Kariv and Heiman 2005, 72). Enhancing resilience also decreased deviant and maladaptive behaviors in college students (Suh and Kim 2009, 34).

Some researchers have examined the effects of short-term resilience training. Ewert and Yoshino (2011, 35) investigated the impact of participation in short-term adventure education on the resilience levels of university students and found a significant increase only in the treatment group. They suggested six themes as important aspects in developing a sense of resilience: perseverance, self-awareness, social support, confidence, responsibility to others, and achievement. Steinhardt and Dolbier (2008, 445) examined the effectiveness of a 4-week resilience intervention to enhance resilience, coping strategies, and protective factors during a period of increased academic stress and found that the experimental group had significantly higher resilience scores and more effective coping strategies than the control group.

To assess the relationship between stress, social support, and resilience in Buddhist college students, we will examine their levels of stress, social support, and resilience and evaluate the mediating effect of social support between stress and resilience, our ultimate goal being to determine if improving social support is an effective way to enhance their resilience. If we find that social support works as a mediating factor between stress and resilience in Buddhist college students, the results may contribute to finding ways to improve social support, thereby enhancing their resilience. In addition, this will enable us to establish a base of knowledge which would be useful in carrying out future social work practice with college students.

III. Methods

A. Participants

Our participants were 51 Buddhist undergraduate students at D University in Seoul. Participants were recruited via direct recruitment by research assistants. The data was gathered from September 2011 to October 2011.

Demographic data of the respondents is shown in table 1. There were 29 (56.9%) females and 22 (43.1%) males. Their average age was 22.6. Regarding economic backgrounds, 31.4% came from families with a monthly income of over 6 million won, and 22% came from families making less than 3 million won a month.

[Table 1] Demographic characteristics of the respondents (N = 51)

Characteristics	N	%	M	SD
Gender				
Male	22	43.1		
Female	29	56.9		
Age (year)			22.6	2.0
Family monthly income				
1-2 million won	1	2.0		
2-3 million won	10	19.6		
3-4 million won	4	7.8		
4-5 million won	9	17.6		
5-6 million won	11	21.6		
More than 6 million won	16	31.4		

B. Measures

1. Stress

Stress was measured using the modified Daily Hassles Scale (DHS) which is based on the original Hassles and Uplifts Scale (DeLongis, Folkman,

and Lazarus 1988, 486). This measurement tool is a revised Korean version for college students (Kim, 1995). This 36 item self-report subjectively assesses stress via 7 subscales focusing on the following: interpersonal issues, work-related issues, economic issues, self issues, environmental issues, family issues, and leisure issues. Respondents rate each item on a 4-point scale as to how much of hassle each item was for them during a recent week. The scale ranges from 1 (none or not applicable) to 4 (a great deal). This tool has been used in many studies and is known to have good reliability and construct validity. Cronbach's alphas for the past studies were .92 (Kim 1995, 51) and .89 (Suh and Lee 2007, 395). Cronbach's alpha for the current sample is .851. Only the total score was utilized in the present analyses.

2. Social Support

Social support was measured using the Multi-dimensional Scale of Perceived Social Support (MSPSS) (Zimet et al. 1988, 30-41). This 12 item self-report measure subjectively assesses social support via 3 subscales focusing respectively on family, friends, and significant others. Examples of items are; "My family really tries to help me"; "I can talk about my problems with my friends"; "There is a special person in my life who cares about my feelings," etc. Respondents rate each item on a 4-point scale as to how much they perceive support. The scale ranges from 1 (none or not applicable) to 4(a great deal). Zimet et al. (1988) reported good internal and test-retest reliability as well as moderate construct validity. They also reported coefficient alphas for the subscales ranging from .85 to .91 and test-retest correlations ranging from .75 to .85. Cronbach's alphas for past studies were .87 (Ahn and Kim 2007, 54) and .92 (Ha 2010, 261). Cronbach's alpha for the current sample is .748. Only the total score was utilized in the present analyses.

3. Resilience

Resilience was measured using the self-report scale for resilience

developed by Block and Block (1980, 39-101). This 12 item self-report measure subjectively assesses resilience. Respondents rate each item on a 4-point scale ranging from 1 (none or not applicable) to 4 (a great deal). This tool has been used in many studies and is known to have good reliability and construct validity. Cronbach's alphas for past studies were .80 (Goo 2000, 26) and .70 (Lee 2004, 23). Cronbach's alpha for the current sample is .923.

B. Data Analyses

Data was analyzed with the Statistical Package for the Social Sciences (SPSS) 19.0 program using frequency analysis, descriptive analysis, correlation analysis, and regression analysis. The mediating effect of social support was analyzed by the method suggested by Baron and Kenny (1986, 1176-80) and the Sobel equation (1982, 290-310).

IV. Results

A. Levels of Stress, Social Support, and Resilience in Buddhist College Students

Buddhist college students reported a relatively low levels of stress (1.58, minimum=1, maximum=4), and moderately high levels of social support (3.29, minimum=1, maximum=4) and resilience (2.95, minimum=1, maximum=4) (Table 2).

[Table 2] Level of stress, social support, and resilience of Buddhist college students

Measures	M	SD
Stress	1.58	.38
Social support	3.29	.39
Resilience	2.95	.43

B. Relationship between Stress, Social Support, and Resilience in Buddhist College Students

Correlation analysis confirmed a significant negative bivariate correlation between stress and resilience ($p < .001$) and a positive correlation between social support and resilience ($p < .005$). Another negative correlation was noted between stress and social support ($p < .005$). However, there was no significant correlation between resilience and demographic variables such as age and monthly family income. Table 3 presents correlations among the primary variables.

[Table 3] Correlation analysis of resilience

	Resilience	Stress	Social support	Age	Monthly income
Resilience	1				
Stress	-.510***	1			
Social support	.430**	-.390**	1		
Age	-.065	.306*	.209	1	
Monthly income	.072	.062	-.039	-.138	1

* $p < .05$, ** $p < .01$, *** $p < .001$

C. Factors Affecting the Resilience of Buddhist College Students

Regression analysis explained the variation in resilience scores based on the composite impact of stress and social support 4 ($R^2 = .323$, $F = 11.428$, $p = .000$). The significant variables were stress ($\beta = -.403$, $p < .003$) and social support ($\beta = .273$, $p = .04$). Table 4 presents results from the regression analysis.

[Table 4] Regression analysis on the resilience of Buddhist college students

Factors	Enter method			
	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>t</i>
Stress	-.421	.135	-.403	-3.124**
Social support	.216	.102	.273	2.112*
R ² = .323				
F = 11.428***				
Constant = 2.977				

* $p < .05$, ** $p < .01$, *** $p < .001$

D. Mediating Effects of Social Support between Stress and Resilience

To check the mediating effect of social support between stress and resilience, we used the method of mediation analysis using regression, as suggested by Baron and Kenny (1986, 1176–80). They discussed three steps in establishing mediation: (1) Show that the initial variable is correlated with the outcome. (2) Show that the initial variable is correlated with the mediator. (3) Show that the mediator affects the outcome variable.

Accordingly, simple regression analysis was done in step 1 and 2, and multiple regression including the initial variable, stress, and the mediator, social support, was done in the last step. Table 5 presents the results of our analysis using this method.

In step 1, stress affected social support negatively ($R^2 = .152$, $\beta = -.390$, $p < .01$). In step 2, stress affected resilience negatively ($R^2 = .260$, $\beta = -.510$, $p < .001$). In step 3, stress affected resilience negatively ($\beta = -.403$, $p < .01$) and social support affected resilience positively ($R^2 = .323$, $\beta = .273$, $p < .05$). Comparing the results of steps 2 and 3, the standardized coefficient of stress changed from $-.510$ in step 2 to $-.403$ in step 3, which indicated the effect of partial mediation of social support in the relationship between stress and resilience.

Reaffirmation was done on the mediating effect of social support by using the Sobel equation¹ (Sobel 1982, 290–310) and the mediating effect of

social support was significant ($z = -2.221$, $p < .05$). Table 6 presents the results from the Sobel test.

[Table 5] Mediating effects of social support between stress and resilience

Step	Dependent Variable	Independent Variable	B	SE	β	t	R ²	F
1	Social support	Stress	-.514	.173	-.390	-2.968**	.152	8.810**
2	Resilience	Stress	-.532	.128	-.510	-4.145***	.260	17.183***
3	Resilience	Stress	-.421	.135	-.403	-3.124**	.323	11.428***
		Social support	.216	.102	.273	2.112*		

* $p < .05$, ** $p < .01$, *** $p < .001$

[Table 6] Sobel test on the path of mediation

Path	ZETA	Significance
Stress → Social support → Resilience	-2.221	$p < .05$

V. Discussion and Conclusions

Recently, Korean society has become more and more concerned about the stress and mental health of Korean college students, and an increasing number of colleges are establishing counseling centers for students. In 2005, about 86% of undergraduate colleges and 53% of junior colleges had such counseling centers in Korea (Park and Cho 2007, 4). In light of this, and with the desire to better understand college students, this study examined the stress, social support, and resilience of Buddhist college students and evaluated the mediating effect of social support between stress and resilience. Ultimately this

$$1 \text{ Sobel equation (1982): } Z_{ab} = \frac{ab}{\sqrt{b^2 SE_a^2 + a^2 SE_b^2}}$$

If z-value is greater than ± 1.96 , the mediation effect is significant ($p < .05$). a is unstandardized coefficient and SEa is standard error in regression of mediator with initial variable. b is unstandardized coefficient and SEb is standard error in regression of dependent variable with mediator.

study aimed to determine whether improving social support was an effective way to enhance the resilience of Buddhist college students. Even so, this study had the limitations of a small sampling size and non-probability sampling. In spite of these limitations, this study is meaningful as it revealed the mediating effect of social support between stress and resilience.

Participants of this study reported a relatively low level of stress (1.58) and a relatively high level of social support (3.29) and resilience (2.95), which are comparable to similar studies using the same measurement tools. For example, the level of stress among college students and graduate students was 1.73 (Suh and Lee 2007, 398) and the level of resilience among adolescents was 2.81 (Lee 2004, 35). The generally positive results of this study can be explained by the fact that participants were average college students and not clients in need of counseling or psychotherapy. However, there were some students whose stress level was very high and counseling or intervention would be beneficial for them.

As for the results of this study, the stress of Buddhist college students is a significant factor affecting resilience, and social support offsets the negative effect of stress on resilience and mediates positively between stress and resilience. These results are compatible with many previous studies that show social support to have a buffering effect during times of personal emotional crisis, maladaptation, and environmental stress (Cohen and Hoberman 1983, 99; Cohen and Wills 1985, 310; Kaplan, Robbins, and Martin 1983, 230). Social support alleviates stress in adolescents and prevents maladaptation or behavioral problems (Cohen and Wills 1985, 310; Compas et al. 1986, 205). Social support from family and friends is related to a high level of resilience in adolescents (Kim 2008, 37). Levels of social support are high in college students with a high level of resilience (Ahn and Kim 2007, 47). Social support enhances resilience in adolescents (Jung and Lim 2011, 37). Therefore, we need to assess the level of social support as well as stress in the process of social work practice with Buddhist college students. If a client student has a high level of stress and a low level of social support, he or she should be an object of case management.

Many studies have suggested that enhancing resilience decreased deviant and/or maladaptive behavior in college students (Suh and Kim 2009, 34) and there is evidence that a short-term resilience training program can be effective in increasing resilience (Ewert and Yoshino 2011, 35; Steinhardt and Dolbier 2008, 445). By adding a concept of social support being a mediating factor on resilience, which is extracted from this study, we should try to strengthen social support to improve the resilience of Buddhist college students. However, there are few programs for improving social support or studies about such programs in Korea.

Many scholars classify social support into three categories, those being support from: family, friends, and significant others. Within a collegiate environment, a social support could be provided by family, friends, and faculty. But studies suggest another source, that being religious belief (John et al. 2011, 393; Menagi, Harrell, and June 2008. 217).

Buddhism is a major religion in Korea and it essentially has strength in coping with stress. Even in Western society, Buddhists contribute to social welfare in the field of stress management (Sherwood 2001, 63-64). *Dukkha*, derived from Buddha's Four Noble Truths (四聖諦), has similarities to psychological stress or dissatisfaction. Buddhists consider stress to be a form of *dukkha* (suffering) and an inevitable part of human existence.

In the *Dhammacakkappavattana Sutta* (初轉法輪經), the Buddha defines suffering (*dukkha*), suffering's origin, the cessation of suffering, and the path leading to the end of suffering in the following terms:

Suffering, as a Noble Truth (*Dukkha sacca*, 苦聖諦), is this: Birth is suffering, aging is suffering, sickness is suffering, death is suffering. Sorrow, lamentation, pain, grief and despair are suffering. Association or connection with what one loathes is suffering, and separation from what one loves is suffering. Not getting what one wants is suffering. In short, the five aggregates of desire are suffering. (SN 56.11)

The origin of suffering, as a Noble Truth (*Samudaya sacca*, 集聖諦), is this: It is the craving that produces renewal of being accompanied by enjoyment and lust, and enjoying this and that; in

other words, craving for sensual desires, craving for being, craving for non-being. (SN 56.11)

The cessation of suffering, as a Noble Truth (*Nirodha sacca*, 滅聖諦), is this: It is the complete fading away and giving up, relinquishing, letting go, and abandoning of the same craving. (SN 56.11)

The way leading to the cessation of suffering, as a Noble Truth (*Magga sacca*, 道聖諦), is this: It is simply the Noble Eightfold Path (八正道) which consists of: right view (正見), right thought (正思惟); right speech (正語), right action (正業), right livelihood (正命); right effort (正精進), right mindfulness (正念) and right concentration (正定). (SN 56.11)

From the Buddhist perspective, suffering and the cause of suffering are dependent on the state of one's mind. So if we can alter our mind, we can eliminate suffering and enter *Nirvana*. According to the Fourth Noble Truth (道聖諦), the cessation of suffering or stress can be attained by following the Noble Eightfold Path (八正道). Actually, Buddhism has developed a system of training and practice to discover the source of *dukkha* and there are various Buddhist techniques to relax both physically and mentally such as tranquility meditation using the breathing method. Some studies have already demonstrated the stress lowering effect of meditation among college students (Oman et al. 2008, 569) and there have been some Buddhist mental health programs to teach the public skills in meditation and stress management (Sherwood 2001, 64). Moreover, Buddhism has wisdom to increase one's resilience as well. Buddhist college students should contact trusted spiritual mentors as well as close family members and friends. In other words, a strong Buddhist faith could also provide another form of social support to Buddhist college students. Buddhist college students should also take the opportunity to taking refuge in the Triple Jewels of Buddhism, purify negative *karma*, and gain *dharma* skills to handle greater adversities, all of which would improve resilience.

Stress and social support have antithetic aspects which affect resilience significantly, and social support mediates positively between stress and

resilience in Buddhist college students. To enhance their resilience in Buddhist college students, we need to alleviate stress and improve their social support with a Buddhist approach.

The American Psychological Association (2012) suggests 10 ways to build resilience: (1) make connections, (2) avoid seeing crises as insurmountable problems, (3) accept that change is a part of living, (3) move toward your goals, (4) take decisive actions (5) look for opportunities for self-discovery, (6) nurture a positive view of yourself, (7) keep things in perspective, (8) maintain a hopeful outlook, (9) take care of yourself, and (10) additional ways of strengthening resilience may be helpful. In light of this advice, Buddhism has much to offer. Connections can be made with a spiritual mentor. And for a Buddhist, change is the very nature of existence and therefore acceptable. For self-discovery, Buddhists are always exhorted to discover their own inner *Bodhisattva* through Buddhist practice or meditation. As an additional way of strengthening resilience, the American Psychological Association (2012) also recommends that meditation and spiritual practices help some people build connections and restore hope, thereby enhancing resilience. Buddhist practice can enhance resilience and ease stress in many ways.

In conclusion, this study has attempted to provide insight into the resilience of Buddhist college students in dealing with stress and social resources. Results demonstrated that stress and social support have antithetic aspects that affect resilience significantly and social support mediates positively between stress and resilience. To enhance resilience in Buddhist college students, we need to alleviate their stress through an understanding of *dukkha* as it is presented in the Four Noble Truths and improve their social support with a Buddhist approach. Further studies are needed to determine the effectiveness of a Buddhist approach on stress and resilience and to increase our understanding of resilience in Buddhist college students.

Abbreviations

SN Saṃyutta Nikāya (相應部)

References

- Ahn, Dohee and Jia Kim 2007 “Resilience of University Students: Coping Strategies, Social Support, Competence, and Academic Performance” [In Korean.]. *The Korean Journal of Education Psychology* 21 (1): 47–67.
- American College Health Association 2006 “American College Health Association–National College Health Assessment (ACHA–NCHA) Spring 2004 Reference Group Data Report.” *Journal of American College Health* 54:201–11.
- American Psychological Association 2012 “The Road To Resilience.” <http://www.apa.org/helpcenter/road-resilience.aspx/> (Accessed July 14, 2012)
- Arnett, Jeffrey J. 2000 “Emerging Adulthood: A Theory of Development from the Late Teens through the Twenties.” *American Psychologist* 55:469–80.
- Arnett, Jeffrey J., and Jennifer L. Tanner 2006 *Emerging Adults in America: Coming of Age in the 21st Century*. Washington, DC: American Psychological Association.
- Arrington, Edith G., and Melvin N. Wilson 2000 “A Re-Examination of Risk and Resilience during Adolescence: Incorporating Culture and Diversity.” *Journal of Child and Family Studies* 9 (2): 221–30.
- Baron, Reuben M., and David A. Kenny 1986 “The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations.” *Journal of Personality and Social Psychology* 51:1173–82.
- Beasley, M., T. Thompson and J. Davidson 2003 “Resilience in Response to Life Stress: The Effects of Coping Style and Cognitive Hardiness.” *Personality and Individual Differences* 34:77–95.
- Block, Jeanne H., and Jack Block 1980 “The Role of Ego-Control and Ego-Resiliency in the Organisation of Behaviour.” In *Development of Cognition, Affect, and Social Relations*, ed. W. Andrew Collins. London: Psychology Press.

- Campbell-Sills, L., Sharon L. Cohan, and Murray B. Stein
2006
"Relationship of Resilience to Personality, Coping and Psychiatric Symptoms in Young Adults." *Behaviour Research and Therapy* 44:585-99.
- Cohen, Sheldon, and Harry M. Hoberman
1983
"Positive Events and Social Supports as Buffers of Life Change Stress." *Journal of Applied Social Psychology* 13:99-125.
- Cohen, Sheldon, and Thomas A. Wills
1985
"Stress, Social Support, and the Buffering Hypothesis." *Psychological Bulletin* 98:310-57.
- Compas, Bruce E., Lesley A. Slavin, Barry M. Wagner, and Kathryn Vannatta
1986
"Relationship of Life Events and Social Support with Psychological Dysfunction among Adolescents." *Journal of Youth and Adolescence* 15 (3): 205-21.
- Connor, Kathryn M., and Wei Zhang
2006
"Resilience: Determinants, Measurement, and Treatment Responsiveness." *CNS Spectrums* 11:5-12.
- Croom, Susan, and Susan Procter
2005
"The New Can Practice Framework: Using Risk and Resilience to Work at the Interface between Professional Expertise and Parental Knowledge and Experience in Child and Adolescent Mental Health." *British Association of Social Workers* 17:113-26.
- Davey, Maureen, Dawn G. Eaker, and Lynda H. Walters
2003
"Resilience Processes in Adolescents: Personality Profiles, Self-Worth, and Coping." *Journal of Adolescent Research* 18 (4): 347-62.
- DeLongis, Anita, Susan Folkman, and Richard S. Lazarus
1988
"The Impact of Daily Stress on Health and Mood: Psychological and Social Resources as Mediators." *Journal of Personality and Social Psychology* 54:486-95.
- Demakis, George J., and Dan P. McAdams
1994
"Personality, Social Support and Well-Being among First Year College Students." *College Student Journal* 28:235-43.

- Dumont, Michelle,
and Marc A.
Provost
1999
"Resilience in Adolescents: Protective Role of Social Support, Coping Strategies, Self-Esteem, and Social Activities on Experience of Stress and Depression." *Journal of Youth and Adolescence* 28 (3): 343-63.
- Dungan, Diane E.
2001
"Five Days of Stress and Coping in the Lives of College Students." PhD diss., Texas: Texas Tech Univ.
- Ewert, Alan, and
Aiko Yoshino
2011
"The Influence of Short-Term Adventure-Based Experiences on Levels of Resilience." *Journal of Adventure Education and Outdoor Learning* 11 (1): 35-50.
- Fergus, Stevenson,
and Marc A.
Zimmerman
2005
"Adolescent Resilience: A Framework for Understanding Healthy Development in the Face of Risk." *Annual Review of Public Health* 26:399-419.
- Gnanarama, Vet.
Pategama
2000
Essentials of Buddhism. Keraniya: Corporate Body of Buddha Education Foundation.
- Goo, Ja-Eun
2000
"The Relationship between Self-Resilience, Positive Emotion, Social Support and Adolescents' Adjustment in Family Life-School Life." Master's thesis. Pusan: Pusan National Univ.
- Ha, Ju-Young
2010
"Impact of Self-Esteem, Family Function and Social Support on Stress in Undergraduate Students." [In Korean.] *Journal of Korean Academy of Fundamental Nursing* 17 (2): 259-66.
- Halamandaris, K.
F., and K. G.
Power
1999
"Individual Differences, Social Support and Coping with Examination Stress: A Study of the Psychosocial and Academic Adjustment of First Year Home Students." *Personality and Individual Differences* 26:665-85.
- Heitzmann, Carma
A., and Robert M.
Kaplan
1988
"Assessment of Methods for Measuring Social Support." *Health Psychology* 7:75-109.
- Hess, Christine R.,
Mia A. Papas, and
Maureen M. Black
2002
"Resilience among African American Adolescent Mothers: Predictors of Positive Parenting in Early Infancy." *Journal of Pediatric Psychology* 27 (7): 619-29.
- John, F.,
A. Adekunle,
M. Jamal,
and B. Tashia
2011
"Religious Commitment, Social Support and Life Satisfaction among College Students." *College Student Journal* 45(2): 393-404.

- Jung, Ji-Young,
and JungHa Lim
2011
“Effects of Temperament, Family Strength and Social Support on Ego-Resilience of Adolescents.” [In Korean.] *Journal of Korean Home Economics Education Association* 23 (1): 37–51.
- Kaplan, Howard
B.,
Cynthia Robbins,
and Steven S.
Martin
1983
“Antecedents of Psychological Distress in Young Adults: Self-Rejection, Deprivation of Support, and Life Events.” *Journal of Health and Social Behavior* 24:230–44.
- Kariv, Dafna,
and Tali Heiman
2005
“Task-Oriented versus Emotion-Oriented Coping Strategies: The Case of College Students.” *College Student Journal* 39:72–84.
- Kim, Chung-Hee
1995
“Relationship of the Daily Hassles, Stress Appraisal and Coping Strategies with Emotional Experiences.” [In Korean.] *The Korean Journal of Counseling and Psychotherapy* 7 (1): 44–69.
- Kim, Soo-Jeong
2008
“The impact of Ego-Resilience and Social Support on Empowerment of Children and Adolescent in Poverty: Focusing on Children and Adolescent without Lunch.” [In Korean.]. *Korean Journal of Child Welfare* 25:9–38.
- Lazarus, Richard,
and Susan
Folkman
1984
Stress, Appraisal, and Coping. NY: Springer.
- Lee, Ye Seung
2004
“A Study on School Stress, Self-resilience and School Adaptation of Adolescents—with Female Students at High School.” [In Korean.] Master’s thesis. Seoul: Ewha Womans Univ.
- Li, Ming-Hui
2008
“Relationships among Stress Coping, Secure Attachment, and the Trait of Resilience among Taiwanese College Students” [In Korean.]. *College Student Journal* 42 (2): 312–25.
- Luthar, Suniya S.,
Dante Cicchetti,
and Bronwyn
Becker
2000
“The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work.” *Child Development* 71:543–62.
- Martinelli, Angella
M.
1999
“An Explanatory Model of Variables Influencing Health Promotion Behaviors in Smoking and Nonsmoking College Students.” *Public Health Nursing* 16 (4): 263–69.

- Masten, Ann S., Karin M. Best, and Norman Garmezy
1990 "Resilience and Development: Contributions from the Study of Children who Overcome Adversity." *Development and Psychopathology* 2:425-44.
- McEwen, Bruce S.
1998 "Protective and Damaging Effects of Stress Mediators." *New England Journal of Medicine* 338:171-79.
- Menagi, Feyza S., Zaje A. T. Harrell, and Lee N. June
2008 Religiousness and College Student Alcohol Use: Examining the Role of Social Support." *Journal of Religion and Health* 47 (2): 217-26.
- Mori, Sakurako
2000 "Addressing the Mental Health Concerns of International Students." *Journal of Counseling and Development* 78:137-44.
- National Law Information Center
2012 "Korean Adolescence Basic Acts." <http://www.law.go.kr/> (Accessed by April 30, 2012)
- O'Donnell, Deborah A., Mary E. Schwab-Stone, and Adaline D. Muyeed
2002 "Multidimensional Resilience in Urban Children Exposed to Community Violence." *Child Development* 73 (4): 1265-82.
- Oman, D., Shauna L. Shapiro, Carl E. Thoresen, Thomas G. Plante, and T. Flinders
2008 "Meditation Lowers Stress and Supports Forgiveness among College Students: A Randomized Controlled Trial." *Journal of American College Health* 56:569-78.
- Park, Kyung-Ae and Hyun-Joo Cho
2007 "Korean College Students' Thought about the Counseling and Psychotherapy." [In Korean.] *The Korea Journal of Youth Counseling* 15 (1): 3-15.
- Rouse, Kimberly A., Gary M. Ingersoll, and Donald P. Orr
1998 "Longitudinal Health Endangering Behavior Risk among Resilient and Non-Resilient Early Adolescents." *Journal of Adolescent Health* 23 (5): 297-302.
- Rutter, Michael
1985 "Resilience in the Face of Adversity: Protective Factors and Resistance to Psychiatric Disorder." *British Journal of Psychiatry* 147:598-611.

- 1993 "Resilience: Some Conceptual Considerations." *Journal of Adolescent Health* 14:626-31.
- Sax, Linda J. "Health Trends among College Freshmen." *Journal of American College Health* 45:252-62.
- 1997
- Schneiderman, N., G. Ironson and Scott D. Siegel "Stress and Health: Psychological, Behavioral, and Biological Determinants." *Annual Review of Clinical Psychology* 1:607-28.
- 2005
- Segrin, Chris "Social Skills, Stressful Life Events, and the Development of Psychosocial Problems." *Journal of Social and Clinical Psychology* 18:14-34.
- 1999
- Sherwood, Patricia "Buddhist Contribution to Social Welfare in Australia." *Journal of Buddhist Ethics* 8:61-74.
- 2001
- Sobel, Mark E. "Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models." In *Sociological Methodology*, ed. Leinhardt, S. Washington DC: American Sociological Association.
- 1982
- Statistics Korea *Population census 2005*. [In Korean.] Seoul: Statistics Korea.
- 2006
- Steinhardt, Mary, and Christyn Dolbier "Evaluation of a Resilience Intervention to Enhance Coping Strategies and Protective Factors and Decrease Symptomatology." *Journal of American College Health* 56 (4): 445-53.
- 2008
- Suh, Kyung-Hyun, and Seong-Min Kim "Roles of Life Stress and Ego-Resilience in Problem Drinking of College Students" *The Journal of Korean Alcohol Science* 10 (2): 21-34.
- 2009
- Suh, Seung Yeun, and Young Ho Lee "The Relationships between Daily Hassles, Social Support, Absorption Trait and Internet Addiction." [In Korean.] *The Korean Journal of Clinical Psychology*, 26 (2): 391-405.
- 2007
- Thoits, Peggy A. "Stress, Coping, and Social Support Processes: Where are We? What Next?" *Journal of Health and Social Behavior*, Special Edition:53-79.
- 1995
- Trapnell, Paul D., and Jennifer D. Campbell "Private Self-Consciousness and the 5-Factor Model of Personality: Distinguishing Rumination from Reflection." *Journal of Personality and Social Psychology* 76:284-304.
- 1999
- Tyson, Paul D., and Rana Pongruengphant "Buddhist and Western Perspectives on Suffering, Stress, and Coping." *Journal of Religion and Health* 46:351-57.
- 2007

-
- Werner, Emmy E.
1993 "Risk, Resilience, and Recovery: Perspectives from the Kauai Longitudinal Study." *Development and Psychopathology* 5:503-15.
- Zimet, Gregory D.,
Nancy W. Dahlem,
Sara G. Zimet,
and Gordon K.
Farley
1988 "The Multidimensional Scale of Perceived Social Support." *Journal of Personality Assessment* 52:30-41.

K C I