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Economic Stress of International Students: What Counselors Should Know

Yuh-Jen Guo
St. Cloud State University, mguo@stcloudstate.edu

Shu-Ching Wang
St. Cloud State University, wangshu066@gmail.com

Angela P. Wong
St. Cloud State University, apwong@stcloudstate.edu

George A. Loftis
St. Cloud State University, loge1201@stcloudstate.edu

Jada M. Mathison
St. Cloud State University, jmmathison1@stcloudstate.edu

See next page for additional authors

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Abstract

College students encounter high levels of stress due to intensive demands from developmental and academic tasks. In addition to the stress induced by developmental and academic tasks, economic stress adds substantial distress to college students. Economic contraction is known to bring up mental health concerns in society. Financial stress and diminished optimism are affected by distressful economic conditions. This study examined the different perceptions of economic stress between American students and international students of one English for Speakers of Other Language (ESOL) program. International students in this study sustained equally high economic stress but were more sensitive to the economic downturn. The results provide an opportunity to inform counselors how to better work with international students regarding their economic stress.

Keywords

International student counseling, Economic stress, College student stress

Author's Notes

Authors

Yuh-Jen Guo, Shu-Ching Wang, Angela P. Wong, George A. Loftis, Jada M. Mathison, and Megan K. Ashpole

Stress is not an unfamiliar term to college students, as they battle various stressors coming from different domains of their lives (Ross, Niebling, & Heckert, 1999). Individual stressors such as adjusting to college life, fulfilling developmental tasks, and dealing with unexpected societal events elevate student's stress levels and contribute to the development of college students' physiological problems (Serlachius, Hamer, & Wardle, 2007) and psychological difficulties (Bell & D'Zurilla, 2009). Solberg, Hale, Villarreal, and Kavanagh (1993) categorized three primary stressors among college students as: academic, social, and financial and the reliability and validity of this categorization were confirmed in recent study (Chuang, Chae, Wu, & Seana, 2017).

Stress and College Students

Demands of college life present constant stressors, which college students must cope with daily. Academic stress has become the primary stressor for college students (Deroma, Leach, & Leverett, 2009; Ross et al., 1999). A study by Abouserie (1994) reveals that academic demands caused severe stress in 10% of college students and moderate stress in 78% of college students. The detriment of stress arrives from multiple domains in college students' lives. In addition to academic stress, life transition into freshman year (Serlachius et al., 2007), daily hassles (Blankstein, Flett, & Koledin, 1991), family relationships (Crespi & Becker, 1999), life-changing events (Cole, 1985), interpersonal and intrapersonal concerns (Ross et al., 1999), and interpersonal relationships (Frazier & Schauben, 1994; Larson, 2006), are among various types of stressors which frequently deliver stress of diverse degrees of intensity and magnitude to college students (Kruisselbrink-Flatt, 2013; Lunney, 2006).

Many stress-induced mental health concerns exist on college campuses where students with underdeveloped stress coping mechanism fall victim to excessive stress. Alcohol consumption (McCormack, 1996; Zack, Poulos, Aramakis, Khamba, & MacLeod, 2007) and cigarette smoking

(Naquin & Gilbert, 1996) have been associated with students' stress. The incidents of physical illness increase under stress (Rawson, Bloomer, & Kendall, 1994), and stressed college students may develop abnormal eating habits (Wichianson, Bughi, Unger, Spruijt-Metz, & Nguyen-Rodriguez, 2009), while also facing a high frequency of suicidal ideations (Dvorak, Lamis, & Malone, 2013; Schwartz, 2006).

Stress and International Students

International students have endured additional unique stressors that are often more intensive than stressors regularly faced by American students. Chen (1999) summarized several major categories of stressors which may further distress international students, including: second language anxiety, intensive educational stressors, sociocultural stressors which come from cultural and racial factors, and financial support. International students in English for Speakers of Other Language (ESOL) programs face additional harsh challenges and stress due to language acquisition and related learning processes (Dewey, Belnap, & Steffen, 2018; Woodrow, 2006). Excessive stress of foreign language study prompts scholars to call for culturally sensitive services to better serve international students' mental health needs (Bradley, 2000; Hyun, Quinn, Madon, & Lustig, 2007; Mori, 2000). International students also endure heightened stress in relation to post-graduate careers. Language barriers and culturally-specific help-seeking behavior reduce international students' utilization of traditional American career counseling services, which could otherwise assist them to cope with stress induced by career choices (Crockett & Hays, 2011).

Impacts of Economic Stress

Economic stress will strike an entire society during economic contraction (Catalano, 2009). It is generated by the economic recession and contraction that create financial stress and subsequent mental health concerns which especially hit vulnerable populations, such as youth and

individuals of low socioeconomic status, with severe consequences (Davalos & French, 2011; Evans-Lacko, Knapp, McCrone, Thornicroft, & Mojtabai, 2013; Haw, Hawton, Gunnell, & Platt, 2015; World Health Organization, 2011). The distressful economic condition elevates individuals' perceived stress and is associated with psychological and physical symptoms (Catalano, 2009; Catalano, Bruckner, Hartig, & Ong, 2005; Catalano & Dooley, 1983; Cokes & Kornblum, 2010; Dooley & Prause, 2005), aggression and behavioral problems (Catalano, Snowden, Shumway, & Kessell, 2007; Dooley, Brook, & Catalano, 1987), substance abuse (Dragun, Russo, & Rumboldt, 2006), psychiatric disorders and suicide (Platt & Hawton, 2000).

Past research has highlighted the importance of studying the influence of economic stress on college student populations (Bushong, 2009; Lewin, 2011). In response to the distressful economic condition, college students may have to delay graduation (Chen & Yur-Austin, 2016) or feel pressured to select study majors or careers based on the influences of the job market (Sander, 2012; Wu, 2011). Lench and Bench (2014) found college students exhibited diminished optimism towards future life events, such as career and marriage during the 2007-2010 economic recession, and a growing future optimism after the recession. The elevated stress induced by the distressful economic condition and the decreased optimism towards the future indicates the influence of economic stress on college students (Guo, Wang, Johnson, & Diaz, 2011; Lench & Bench, 2014).

Purpose of Current Study

International students face pressure from both the academic performance and adjustment to foreign culture (Nilsson, Butler, Shouse, & Joshi, 2008). Yakushko, Davidson, and Sanford-Martens (2008) studied 132 international students over a five-year period of college counseling center records and found relationship issues, depression, isolation or loneliness, anxiety, and self-esteem issues as the top five presenting concerns. Poyrazli (2015) found that international students

have the greatest concerns from the categories of academics, career, and stress.

The economic crisis had greatly impacted the mental health and psychological wellbeing of American college students (Stein et al., 2013). While international students endure commonly shared stressors existing among American students and some unique stressors that further distress international students, their concerns on economic stress should be carefully studied to reflect how they perceived the influences of economic crisis. This research question is "Is there a difference of perceived economic stress between international and American students?" We hypothesize first that international students endure a greater economic stress than their American counterparts. Our second hypothesis is that international students perceive a higher level of elevated economic stress than their American counterparts do. The findings are expected to answer whether economic stress impacts international and American students differently.

Method

Participants

Participants were recruited from a southwestern public university where the largest ethnicity group is Hispanic. After the study proposal was approved by the Institute Review Board, recruitment was conducted on campus in a survey study which required participants to complete a survey questionnaire. A total of 628 undergraduate students responded to our survey. International students who participated in this research were attending the required course of English for Speakers of Other Languages (ESOL). The recruitment of international students happened in ESOL classes since most international students must take ESOL classes. Non-ESOL students were recruited in a similar process while researchers visited all undergraduate classes listed on university schedule to recruit participants. Students chose to voluntarily participate in this study by completing the survey questionnaire. This sampling process followed the convenience sampling

principles to seek research participants from classrooms on campus (Privitera, 2017). The demographic information of participating students is displayed in Table 1.

Table 1

Participant Demographics

	All Students (n=628)	International Students (n=52)	American Students (n=576)
Age:			
Mean	20.46	19.69	20.53
Range	17-57	18-28	17-57
Gender:			
Male	43% (n=270)	51.9% (n=27)	42.2% (n=243)
Female	57% (n=358)	48.1% (n=25)	57.8% (n=333)
Ethnicity:			
Asian	1.1% (n=7)	1.9% (n=1)	1% (n=6)
African American	2.4% (n=15)		2.6% (n=15)
American Indian	0.8% (n=5)		0.9% (n=5)
Caucasian	6.7% (n=42)	3.8% (n=2)	6.9% (n=40)
Hispanic	85.5% (n=537)	94.2% (n=49)	84.7% (n=488)
Other Ethnicity	3.5% (n=22)		3.9% (n=22)

Measures

Different methods have been used to assess stress induced by economic and financial factors. Previous research used welfare status and family income (Takeuchi, Williams, & Adair, 1991) to measure the levels of economic stress in families. Lempers, Clark-Lempers, and Simons (1989) developed a 12-item Economic Hardship Questionnaire from poll questions. Northern, O'Brien, and Goetz (2010) published a standardized 22-item Financial Stress Scale for college students; however, this scale focused solely on financial deficits in the past six months. Without a

well-established instrument for economic stress, Shek (2003, 2005) suggested the use of self-developed items for measuring economic stress. Shek (2003, 2005) used four items with straight-forward language to request rating of one's current economic stress.

Following Shek's suggestion, this study developed six items to assess economic-induced stress. While this study was conducted shortly after the 2008 economic contraction, it aimed to assess how participants reacted to the economic downturn in comparison to the pre-contraction era and the future. Six economic stress items were selected to assess how college students evaluate their stress levels against the following stressors (see Appendix):

1. Current Employment Opportunities & Condition

2. Future Employment Opportunities

3. National/Global Financial Outlook & Economic Development

4. Current Financial Burden

5. Previous Stress Level (prior to economic contraction)

6. Current Stress Level (during economic contraction)

Participants were requested to evaluate the above six items based on a self-reported five-point Likert type scale of stress (1=Lowest and 5=Highest). Two composite variables were calculated based on the data of these items. The first composite variable of "Economic Stress" was calculated by combining stress items 1 through 4. This composite variable reflected the overall assessment on economic stress. The second composite variable is "Stress Change," which was obtained by calculating the difference between item 5 and 6. The "Stress Change" reflected the change of perceived economic stress prior to and during this economic contraction.

Testing of the survey reliability was conducted prior to data analysis to ensure the integrity of this survey. All six items on economic stress and the two composite variables were analyzed

upon their internal consistency. The test result reported a .792 on Cronbach's Alpha. This test result exceeded the acceptable value of .70 suggested by Nunnaly (1978) and indicated the confidence on reliability to continue further data analysis procedures.

Procedures

An IRB approval was obtained to allow the research design and survey used in this study. This anonymous study used a survey with a demographic sheet and the six economic stress items. Survey forms were distributed to college students on campus during a fall semester. College students were provided with an information letter that introduced the purposes of this study and listed research participants' rights and tasks. Participants voluntarily participated in this research by completing and returning the stress survey to the researchers. Participants were also provided referral information for the university counseling center should they find their stress levels increased while participating in this research.

Data Analysis

For hypothesis testing, a Multivariate Analysis of Variance (MANOVA) was conducted to analyze the categorical independent variable (student type: International and American students) and the two quantitative dependent variables (economic stress and stress change). Although the two sample groups had unequal numbers, such condition posed no threats to variance heterogeneity (Keppel & Wickens, 2004). Thus, MANOVA was adopted due to its capacity to conduct appropriate statistical analysis on the types of variables in this study while limiting the inflation of Type I error (Meyers, Gamst, & Guarino, 2006). The statistical power was set at P value less than .05 in this analysis.

<div align="center">

Results

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Descriptive analysis was conducted to present the essential information of our data. The

mean scores and standard deviations are listed in Table 2.

Table 2

Descriptive Analysis

	Economic Stress		Stress Change	
	Mean	SD	Mean	SD
International Students (n=52)	12.37	3.72	1.60	1.29
American Students (n=576)	11.94	3.58	1.24	1.23

A two-group between-subjects multivariate analysis of variance (MANOVA) was conducted to test two hypotheses with the two dependent variables, economic stress and stress change. The independent variable was the student type, ESOL (n=52) and non-ESOL (n=576). The results of MANOVA are listed in Table 3 below.

Table 3

Analysis of Economic Stress and Stress Change

	Multivariate		Univariate	
Source	df	F	Economic Stress	Stress Change
F ratios: Student Type	1	2.047	.655	3.892[*]
Mean Square			8.451	5.946

Note: Multivariate F ratios were generated from Wilks's Lambda. Multivariate df=2, 625; Univariate df=1, 626. *p<.05

The result of multivariate analysis yielded no significant effects of student type on the composite dependent variate (Wilks's λ, $F[2, 625] = 2.047$, $p < .13$, partial $\eta^2 = .007$). Univariate ANOVAs were followed to analyze each dependent variable and detect the statistically significant multivariate effect. As shown in Table 3, the univariate analysis yielded one significant (stress

change) and one insignificant (economic stress) outcome. The univariate result indicated that student type had significantly affected stress change, $F(1, 626)=3.892$, $p< .049$, partial $\eta^2 = .006$, pointing out that international students experienced greater stress increase (Mean=1.60, SD=1.29) than American students (Mean= 1.24, SD=1.23). There was no statistically significant effect of student type observed for economic stress, $F(1, 626) = .655$, $p> .05$. Both student types scored similarly on the high end of economic stress in a range of 5-15 (International Students mean=12.37, American Students=11.94).

Discussion

Coping with stress becomes part of daily functioning for college students as they are often overwhelmed by various stressors (Crespi & Becker, 1999; Larson, 2006; Ross et al., 1999; Serlachius et al., 2007). Literature has shown an abundant knowledge on the study of stress among college students (e.g., Abouserie, 1994; Blankstein et al., 1991; Frazier & Schauben, 1994; Larson, 2006; Ross et al., 1999). Excessive stress has been associated with adverse psychological and physical symptoms (Joseph, Mynard, & Mayall, 2000; Lunney, 2006).

College students' battles with stress becomes more difficult when there are additional stressors with widespread impacts. Economic contraction carries a large-scale impact and has stimulated the escalation of perceived stress and greater concerns on public health and psychiatric disorders (Catalano, 2009; Catalano et al., 2007; Cokes & Kornblum, 2010; Dooley & Prause, 2005; Platt & Hawton, 2000). It delivers adverse influences on mental and physical health (Catalano et al., 2005; Cokes & Kornblum, 2010; Dooley & Prause, 2005; Dragun et al., 2006). However, the influences of economic stress among college students still need research attention (Bushong, 2009; Lewin, 2011). This research aims to study the economic stress among college students and the difference of perceived economic stress between international and American

students. It is crucial to study and compare the economic stress endured by international students, who often sustain greater stress than their American counterparts (Bradley, 2000; Dewey et al., 2018; Hyun et al., 2007).

Our findings reveal a significant stress increase when international students compared their perceived economic stress with and without economic contraction. American students perceived a smaller increase of economic stress in response to economic change, while both American and international students perceived high economic stress similarly due to economic contraction. Our findings support current literature indicating the essential stressors of economic stress, such as unemployment rates (Artazcoz, Benach, Borrell, & Cortès, 2004; Terry & Whitman, 2011) and financial burdens (Frazier & Schauben, 1994; Lewin, 2010), are taking a toll on college students.

It is important to discuss the high percentage of Hispanic international (94.2%) and Hispanic American (84.7%) students surveyed in this study. Hispanic college students have been studied for minority stress (Arbona & Jimenez, 2014) and stress induced by discrimination (Cheng & Mallinckrodt, 2015), and perceived similar intensity of stress in a comparison study across several ethnicity groups (Turner & Smith, 2015). Realizing there are cultural and racial factors contributing in to the stress of Hispanic college students helps us view our research results in a cultural context. Our findings support the view that indicates college students of all ethnicities sustain a similar high level of stress (Turner & Smith, 2015). However, the impacts of economic stress may pose a significant increase of perceived stress on international students. Future research may continue to study the interaction of economic stress and cultural factors to explore the sensitivity of economic changes among international students.

Limitations and Implications

International students, who come from foreign countries, must overcome stressors

associated to their unique language, ethnicity, and cultural factors that are not usually seen in American students (Arbona & Jimenez, 2014; Cheng & Mallinckrodt, 2015; Nilsson et al., 2008, Crockett & Hays, 2011). While the levels of stress soar universally among college students of all ethnicities (Turner & Smith, 2015), the additional impact from economic stress further pushes college students into a distressful condition (Chen & Yur-Austin, 2016; Lench & Bench, 2014; Sander, 2012; Wu, 2011). International students require specific attention to understand the unique conditions for the delivery of mental health services which meet international students' needs. Finding a different perception of economic stress in this study marks a critical revelation for counselors who provide mental health services to international students.

Specific Needs of International Students

Counseling international students appears to be a foreign phenomenon to the traditionally trained counselors (Olivas & Li, 2006). Unique stressors of international students emerge from many cultural barriers (Misra, Grist, & Burant, 2003; Yoon & Portman, 2004). Adjusting to a foreign culture is identified as a source of acculturation stress (Abbassi & Stacks, 2007; Olivas & Li, 2006); however, acculturation stress is complex and may not be fully detected only with questionnaires (Chavajay & Skowronek, 2008).

Acculturation-related stressors also fence in a group of diverse factors further distressing international students. Second language anxiety, academic stress, ethnicity-related stress, social isolation, homesickness, and financial stress are among the critical stressors challenging international students (Bradley, 2000; Chen, 1999; Dewey et al., 2018; Mori, 2000; Woodrow, 2006; Yeh & Inose, 2003). Adding economic stress worsens the distressful condition of international students while they feel pressured by financial burden and diminished future optimism in pursuit of academic performance (Chen & Yur-Austin, 2016; Lench & Bench, 2014;

Sander, 2012; Wu, 2011).

While certain stressors, such as acculturation, remains universal despite international students' countries of origin, unique stressors may come from what is in the U.S. society or the conditions of students' home countries. International students, who plan to immigrate to the United States after graduation, must consider the employment and economic environment in the United States (Arthur & Flynn, 2011). This stress is unique to international students since their options are limited when employment opportunities dwindled due to economic downturn. When the economic stressor fluctuates following the economic conditions in the U.S. and around the globe, counselors have to attune to how international students are impacted by the economic situations in their home countries (McVay, 2015) as well as how the U.S. economy may be associated with international students' stress induced by financial stress and diminished optimism (Guo et al., 2011; Lench & Bench, 2014). The research on economic stress and its impacts on international students should draw future research to further understand the difference of influences on international students' mental health. The contributing and protective factors should be carefully explored to provide empirically supported outcomes for counselors who may work with international students under the impacts of economic stress.

Strategies for Counselors

The mental health concerns surrounding international students become critical when literature warns mental health professionals about the help seeking behaviors of international students. These students may perceive counseling differently than what is expected in the American style of mental health counseling (Byon, Chan, & Thomas, 1999). They expect a significantly different counseling process and outcome and seek a counseling style that matches what they expect (D'Rozario & Romano, 2000; Lee, Ditchman, Fong, Piper, & Feigon, 2014;

Mitchell, Greenwood, & Guglielmi, 2007; Yi, Lin, & Kishimoto, 2003). The unique stressors of international students should prompt counselors to become culturally sensitive and competent in addressing special needs of international students (Misra, Grist, & Burant, 2003; Yoon & Portman, 2004).

Knowing the unique conditions associated with the mental health of international students, our study furthers the quest for exploring the economic stress among college students and raises concerns regarding a significantly different reaction to economic stress among international students. This is a starting point to explore the complexity of stressors which contribute to the mental health of international students during distressful economic contraction. Regarding the economic stress, certain strategies could be implemented to help counselors better understand international students' concerns.

1. Counselors should become culturally sensitive to provide a service which can be accepted by international students (Byon et al., 1999). The first impression of counseling may determine whether an international student select to accept the counselor's service or not.

2. Counselors should be aware of economic statuses in students' home countries. While their American counterparts endure stressors coming from the U.S. society, international students often face a greater challenge when their home countries are far away. Understanding the changes in home countries may negatively impact international students (McVay, 2015), counselors should not ignore to explore the status of students' home countries.

3. Counselors should explore how international students have been impacted by the U.S. economy. While economic stress exists among American students (Guo et al., 2011), it

is perceived more intensively by international students as shown in the results of this study. Counselors should not assume the levels of impact and concerns regarding the economy will be similar between American and international students.

4. Counselors should attune to future expectations of international students when economy is changing. While economic stress appears to come from current status of economy, it is also an important index for international students to consider their future in the United States. Economic stress reflects current financial concerns as well as the expectation of opportunities in the future (Guo et al., 2011; Lench & Bench, 2014). Counselors who are serving international students should assess how students perceive the future and how such perception impacts their current functioning.

5. Counselors should be familiar with resources that are critical to international students. Being away from home in a foreign land has placed international students in a position to feel isolated and lonely (Yakushko et al., 2008). Connecting international students to resources, such as the international student office on college campuses and student organizations of different countries of origin, could provide pivotal information and comfort to international students.

Limitations

This study involved a large percentage of Hispanic participants. The sampling process also yielded a small size of international students. The unequal group sizes among ethnicity groups and between the international and American student groups may be a concern to the generalization of the research results. Although unequal group sizes pose no threats to variance heterogeneity in statistical analyses (Keppel & Wickens, 2004), this phenomenon may affect the interpretation and implication of research results. The limitations of sampling and the use of self-report survey raise

concerns over the generalizability of our findings (Erford, 2008). The "Nonresponse bias" (Erford, 2008, p. 143) indicates our results may not necessary reflect the viewpoints of those students who decided not to participate in this study. Additionally, this study was conducted shortly after the economic crisis of 2008. It might capture the social atmosphere at that time; however, its results should be as relevant as contemporary study since the economic trend stays unstable and uncertain in today's global environment. Understanding how individuals will be impacted by economic conditions will be one of the essential topics in mental health study. Interpretations of the findings beyond the scope of our focus may not yield proper implications.

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Appendix

Survey of Economic Stress

Rate your stress level on these items which are resulted from current socioeconomic conditions	Lowest ⟵⟶ Highest				
	1	2	3	4	5
* Current Employment Opportunities & Condition					
* Future Employment Opportunities					
* National/Global Financial Outlook & Economic Development					
* Current Financial Burden					

Rate your stress level according to the socioeconomic conditions at the following times	Lowest ⟵⟶ Highest				
	1	2	3	4	5
* Your Stress Level Prior to Current Socioeconomic Conditions (before 2007)					
* Your Current Stress Level					