Background

The number of Vietnamese international students in the US reached 22,438 in 2017, and has been continuously increasing for 10 years (vnmission, 2017). However, there is no known research study done to exclusively examine the psychological well-being of this specific population.

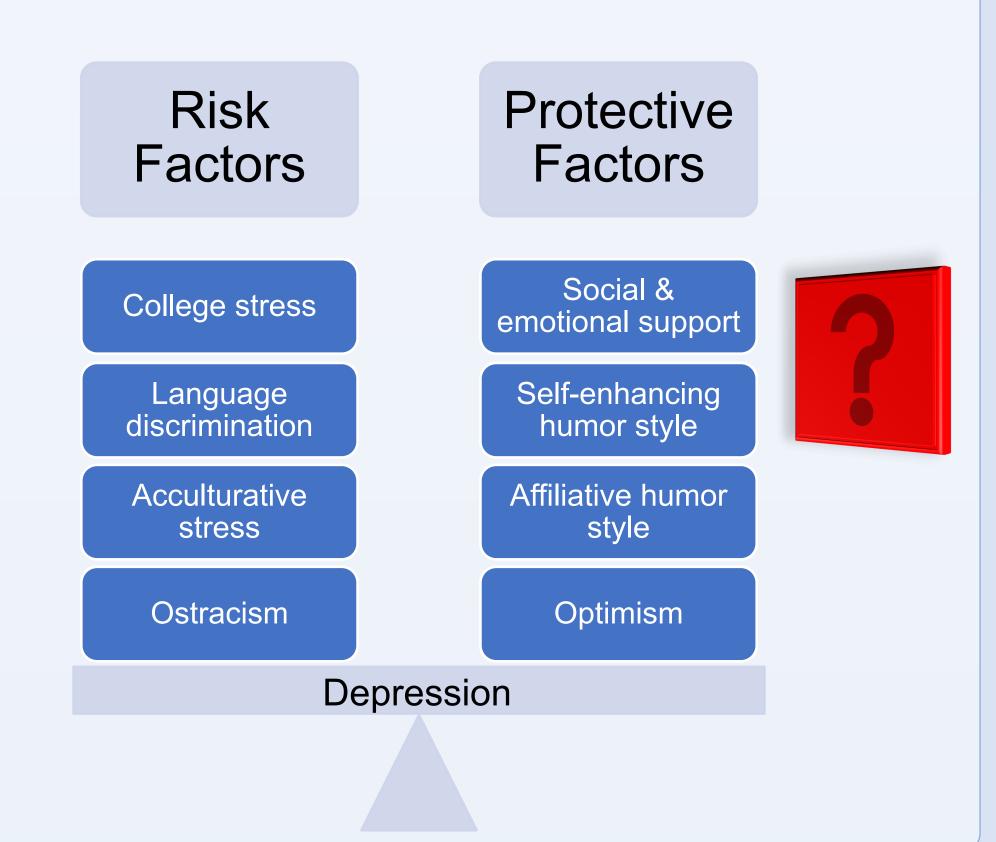
There have been a number of research studying mental health of East Asian international students (i.e., China, South Korea, Hong Kong, Taiwan, and Japan), and the topics that have been studied at are: language barriers, acculturation process, social length networking, depression, and help-seeking behavior (Zhang-Wu, 2018; Li, Wang, & Xiao, 2014). These suggest the difficulties that East Asian international students have to face in addition to the stressors of being a college student. Vietnamese students in the US are likely to suffer from the same psychological distress that have been reported for East Asian students due to the similarity in cultural cultural, ethnical, and racial values.

Factors that relate to the mentioned topics like language discrimination, ostracism, and acculturative stress, among others like lack of social support due to geographical distance, make the population more vulnerable to poor mental health and depression, particularly. Additionally, Vietnamese students may be less likely to seek professional help and recognize the problems, due to the paucity of exposure to psychological knowledge and services in home country. This is suggested by a research done to examine mental health resources in Viet Nam (Weiss, Dang, Ngo, Pollack, Sang, Lam... & Do, 2011).

On the other hand, optimism and humor styles have been shown to linked closely to depression and mental well-being (as cited in Conversano, Rotondo, Lensi, Della Vista, Arpone, & Reda, 2010; Martin et al., 2003; Tucker et al., 2013, Martin, 2007). It is important to study what the risk factors for depression are, but it is also essential to study what can buffer against depression.

Objectives

- To measure depression and evaluate the its prevalence in the Vietnamese international students in the US.
- To examine the strength of different relationships among the risk factors, between the risk factors and depression, among risk factors and protective factors, among protective factors, between protective factors and depression.
- To examine which factor(s) is more strongly predict depression or buffer against depression.
- Examine potential influential factors that may have an impact on depression like location in the US, type of school enrolled, school perceived diversity, social support from religious groups, relatives in the US, and romantic partner, etc.



Depression and Acculturative Stress Among Vietnamese International Students: A Study to **Examine Risk Factors and Protective Factors** Dung Dinh & Dr. Shannon Lupien

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Procedure and Methods

The study recruited participants via Facebook groups that presumably have the majority are Vietnamese students in the US. Posts are sent once or, in some groups twice, to recruit participants. A brief description of the study, a link to SurveyMonkey, and a picture are included in the posts.



Self-report measures are used to assess different variables. Participants can pick from 2 versions of the survey: English or Vietnamese. Except CES-D, other scales were translated from English to Vietnamese by the researcher and back-translated by a Vietnamese graduate student in England.

Depression

- CES-D (Radloff, 1977)
- CES-D--Vietnamese version (CES-D; Thai, Jones,
- Harris, & Heard, 2016)

Acculturation Stress

 Acculturative Stress Scale for International Students (including Perceived Discrimination, Homesickness, Perceived Hate, Fear, Guilt, and Stress Due to Cultural Shock subscales) (ASSIS; Sandhu & Asrabadi, 1994)

Perceived Language Discrimination

• Perceived Language Discrimination Scale (PLD; Wei, Wang, & Ku, 2012)

College stress

 College Stress Inventory—Modified (including Social, Financial, Academic Stress subscales) (Solberg, Hale, Villarreal, & Kavanagh, 1993)

Ostracism

- Ostracism Experience Scale for Adolescents (Gilman, Carter-Sowell. DeWall. Adams. & Carboni. 2013)
- Optimism
- 8 items for Personal optimism the Questionnaire for the Assessment of Personal Optimism and Social Optimism—Extended (POSO-E; Schweizer, & Koch, 2003)

Humor styles

• Humor Styles Questionnaire—Content Version (4 distinct styles of humor: Affiliative, Self-Enhancing, Aggressive, Self-Defeating) (Ruch, & Heintz, 2018)

Potential influential factors

- Gender, sexual orientation, religion, etc.
- Intention to stay in the US after graduation, whether they have relatives in the US, whether the relatives live close, etc
- School types and their diversity
- Other factors

Results

Correlations Among risk factors

All risk factors significantly positively correlated with each other. For example, the acculturative stress has a significant positive correlation with the college stress (r=.57,p<.01), perceived language discrimination (r=.72,p<.01), and ostracism (r=.48,p<.01). **Depression and risk factors**

Depression significantly positively correlated with acculturative stress (r=.64,p<.01), perceived language discrimination (r=.46, p<.01), college stress (social, financial, and academic) (r=.54, p<.01), ostracism (r=.65, p<.01).

Among protective factors

Surprisingly, optimism did not only significantly positively correlated with affiliative (r=.51,p<.01) and self-enhancing (r=.46,p<.01) styles of humor, but also significantly positively correlate with aggressive style (r=.45, p<.01).

Depression and protective factors

Depression significantly negatively correlated with affiliative humor style (r= -.26, p<.05) and negatively correlated with optimism (r= -.62, p<.01).

Depression significantly negatively correlated with how much diversity the participant think their school has (r= -.27, p<.05) and whether they have relatives living in the US (r = -.34, p < .01).

Additional interesting correlations

The language the participants picked significantly positively correlated with college stress (r=.42, p<.01), meaning the more likely they were to pick Vietnamese as the language to respond to the survey, the more stress they have. Similarly, the language picked significantly correlated with ostracism (r=.27, p<.01). Humor styles

Affiliative humor styles significantly negatively correlated with not only depression but most of the risk factors, language discrimination (r=-.31, p<.01), acculturative stress (r=-.29,p<.05), and ostracism (r=-.36, p<.01).

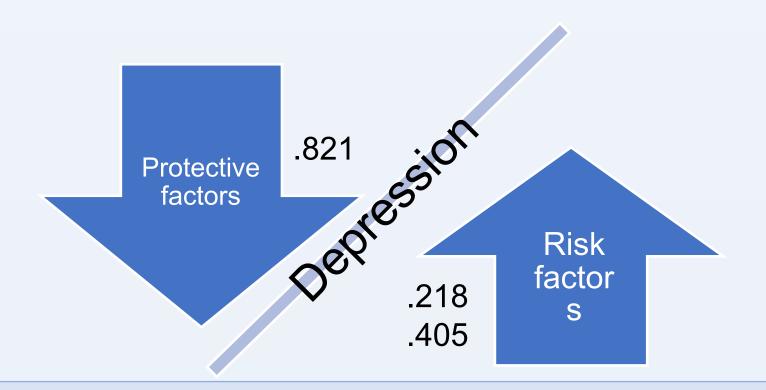
le 1: Correlations of depr	ession,	risk fac	tors, pro	tective fa	ictors, an	d potenti	al influer	ntial fact	ors						
iables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Depression	-														
cculturative stress	.64**	-													
Perceived language	.46**	.72**	-												
College stress (social, demic, & financial)	.54**	.57**	.57**	-											
Dstracism	.65**	.48**	.54**	.59**	-										
gressive humor	-0.17	-0.09	-0.11	0.00	32**	-									
Self-defeating humor	0.08	0.09	0.08	0.13	-0.01	.63**	-								
Dptimism	62**	47**	43**	46**	53**	.45**	0.08	-							
ffiliative humor	26*	29*	31**	-0.19	36**	.53**	.27*	.51**	-						
Self-enhancing humor	-0.12	0.00	-0.05	0.09	24*	.82**	.46**	.46**	.57**	-					
Perceived diversity at ool enrolled	27 [*]	24*	-0.10	0.00	-0.15	-0.07	-0.08	0.05	0.19	0.05	-				
Having relatives in the	34**	-0.10	-0.05	-0.04	35**	.23*	-0.03	.24*	0.17	0.22	.29*	-			
Time staying in the US	-0.23	-0.09	-0.14	28*	36**	.24*	.25*	0.16	0.18	0.15	-0.02	.24*	-		
Intention to stay in the after graduation	-0.23	-0.14	0.08	-0.10	-0.04	0.21	0.11	.34**	0.07	.25*	-0.23	0.15	0.17	-	
Language picked to bond	0.10	0.05	0.11	.42**	.27*	-0.18	34**	-0.16	-0.08	-0.06	-0.05	-0.02	40**	-0.20	-
Correlation is significant a correlation is significant at															

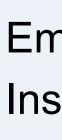
Regression

Risk factors vs. Protective factors

A significant regression equation was found F(4,67) = 22.79, p<.001, with an R² of .576. All 4 risk factors (acculturative stress, language discrimination, college stress, and ostracism) accounted for 57.6% of the variance in depression level. Among those, depression increase .218 when acculturative stress increase 1 unit, and depression increase .405 when ostracism increase 1 unit.

A significant regression equation was found F(2,65) = 5.45, p<.01, with an R² of .637. Optimism and affiliative humor style accounted for 63.7% of the variance in depression level. Increasing 1 unit of optimism, depression will decrease .821.





(I want to put some type of graph for the prevalence of depression but don't know which one will be good)

Conclusions

The study found that the risk factors (acculturative stress, ostracism, language discrimination, and financial, social, academic stressors) that are detrimental to mental health often relate to each other, and the present of one is likely to be concurrent with the others. The more the participants face the mentioned risk factors, the more depressive symptoms they experience, and this apply to all the risk factors above.

Optimism is showed to connect with the adaptive humor styles, which is consistent with previous research across different population. The more optimistic people are and the more they use affiliative humor, the lower their depression level is, which is consistent with previous research. More significantly, the more people use the affiliative humor style, the less they report to face most of the above risk factors. When perceiving that the institution they enrolled in have more diversity and when they have relatives in the US, they are less likely to experience depressive symptom. This suggests that these can be considered as perceived social and emotional support from their surroundings.

However, scoring higher on maladaptive styles does not relate to how much they experience depressive symptoms. This propose a complicated relationship of humor styles among Vietnamese, also because all humor styles correlated with each other although they belong to different contradictory categories. This can be because of the cultural differences and how Vietnamese perceive humor.

Comparing risk factors and protective factors in predicting changes in depression has shown that optimism alone can buffer against depression, and predict the decrease of depression stronger than risk factors can predict its increase.

References

Conversano, C., Rotondo, A., Lensi, E., Della Vista, O., Arpone, F., & Reda, M. A. (2010). Optimism and its impact on mental and physical well-being. Clinical Practice and Epidemiology in Mental Health, 6. https://doiorg.ezproxy.daemen.edu/10.2174/1745017901006010025

Li, J., Wang, Y., & Xiao, F. (2014). East Asian International Students and Psychological Well-Being: A Systematic Review. Journal of International Students, 4(4), 301–313. Retrieved from https://search-ebscohost com.ezproxy.daemen.edu/login.aspx?direct=true&AuthType=cookie,ip,uid&db=eue&AN=94361284&site=ehost-

Martin, R. (2007). Humor and Mental Health. In The psychology of humor: An integrative approach (Educational psychology) (pp. 269-307). Burlington, MA: Elsevier Academic Press. (2007). Retrieved from WorldCat. Martin, R., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the humor styles questionnaire. Journal of Research in Personality, 37(1), 48-75. doi:10.1016/S0092-6566(02)00534-2

Radloff, L. S. (1977). Center for Epidemiological Studies Depression Scale. PsycTESTS. https://doi-

org.ezproxy.daemen.edu/Full; Full text; 999902942 full 001.pdf

Ruch, W., & Heintz, S. (2018). Humor Styles Questionnaire--Content Version. PsycTESTS. https://doiorg.ezproxy.daemen.edu/Full; Full text; 999969648 full 001.pdf

Sandhu, D. S., & Asrabadi, B. R. (1994). Acculturative Stress Scale for International Students. PsycTESTS. https://doiorg.ezproxy.daemen.edu/Full; Full text; 999962213 full 001.pdf

Schweizer, K., & Koch, W. (2003). Questionnaire for the Assessment of Personal Optimism and Social Optimism-Extended. PsycTESTS. https://doi-org.ezproxy.daemen.edu/10.1037/t11477-000 Solberg, V. S., Hale, J. B., Villarreal, P., & Kavanagh, J. (1993). College Stress Inventory--Modified. PsycTESTS.

https://doi-org.ezproxy.daemen.edu/Full; Full text; 999919528 full 001.pdf Thai, T. T., Jones, M. K., Harris, L. M., & Heard, R. C. (2016). Center for Epidemiologic Studies Depression Scale--Vietnamese Version. PsycTESTS. https://doi-org.ezproxy.daemen.edu/Full; Full text; 999958077_full_001.pdf Tucker, R., Judah, M., O'Keefe, V., Mills, A., Lechner, W., Davidson, C., . . . Wingate, L. (2013). Humor styles impact the relationship between symptoms of social anxiety and depression. Personality and Individual Differences, 55(7), 823-827. doi:10.1016/j.paid.2013.07.008

vnmission (2017, November 14). Vietnamese Students in the United States Increase for 16th Straight Year. U.S. Embassy & Consulate in Vietnam. [online] U.S. Embassy & Consulate in Vietnam. Retreived from https://vn.usembassy.gov/vietnamese-students-united-states-increase-16th-straight-year/

Wei, M., Wang, K. T., & Ku, T.-Y. (2012). Perceived Language Discrimination Scale. PsycTESTS. https://doiorg.ezproxy.daemen.edu/Full; Full text; 999917023 full 001.pdf

Weiss, B., Dang, H., Ngo, V., Pollack, A., Sang, D., Lam, T. T., . . . Do, K. N. (2011). Development of Clinical Psychology and Mental Health Resources in Vietnam. *Psychological Studies*, 56(2), 185-191. doi:10.1007/s12646-011-0078-x

Zhang-Wu, Q. (2018). Chinese International Students' Experiences in American Higher Education Institutes: A Critical Review of the Literature. Journal of International Students, 8(2), 1173–1197. https://doiorg.ezproxy.daemen.edu/10.5281/zenodo.1250419

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