

UNIVERSITI PUTRA MALAYSIA

MODERATING ROLE OF MEANINGFUL INTERACTION ON THE RELATIONSHIP BETWEEN PARTICIPATION OF DIVERSITY ENGAGEMENT ACTIVITIES AND CAMPUS CLIMATE WITH CIVIC RESPONSIBILITY

LOH YIT PHING

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By

LOH YIT PHING

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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By

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November 2020

Chairman : Associate Professor Jusang Bolong, PhD Faculty : Modern Languages and Communication

Due to changing demographics in higher education and increasing demands of the educative value of diversity in need, "twenty-first-century college student diversity outcomes" is a term used to describe the skills necessary for college graduates to function in the diverse world. University level is an excellent platform to cultivate diversity engagement among undergraduate students. There are many studies suggested that through diversity engagement, it will enhance various learning outcome, including a sense of civic responsibility.

This study analyzes the relationship between the level of participation in curricular diversity engagement activity, co-curricular diversityengagement activity, level of campus climate, level of participation in meaningful interaction with a sense of civic responsibility. Finally, it tested the level of meaningful interaction as a moderator between the relationship of level of participation in curricular, co-curricular and civic responsibility among students of different ethnicities at six Malaysia universities. By adopting purposive sampling, 1420 respondents were involved in this study.

Survey through self-administered questionnaires was used in this study. Social Package for the Social Sciences (SPSS) and Structured Equation Modelling (SEM) with Partial Least Squares (PLS)was used to test the relationship between constructs this study.

The study found that less than 25 per cent of students have a high level of participation in curricular and co-curricular diversity engagement activity. More than 80 per cent of students agreed that a sense of civic responsibility is important to them. This study also found that co-curricular diversity engagement activity, campusclimate and meaningful

interaction have significant relationship with civic responsibility. However, curricular diversity engagement activity did not have relationship with civic responsibility. Meaningful interaction did not moderate the relationship between co-curricular diversity engagement activities with civic responsibility. However, it did moderate the relationship between curricular diversityengagement activities with civic responsibility. The findings provided useful information to better understanding regarding the level of participation of students indiversity engagement activity and their sense of civic responsibility. This finding also could be used by the university to develop better curricular and co-curricular diversity engagement activity and enhance campus climate that supports diversity.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PERANAN INTERAKSI BERMAKNA SEBAGAI MODERATOR DALAM HUBUNGAN ANTARA TERHADAP PENGLIBATAN AKTIVITI KEPELBAGAIAN DAN IKLIM KAMPUS DENGAN TANGGUNGJAWAB SIVIK

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Perubahan demografi dalam pendidikan tinggi dan peningkatkan kepentingan nilai kepelbagaian semakin dihargai. "hasil pembelajaan kepelbagaian pelajar kolej abad ke-21" adalah istilah yang baru yang digunakan untuk menggambarkan kemahiran yang diperlukan oleh siswazah kolej untuk berfungsi di dunia yang kepelbagaian. Pendidikan di tahap universiti adalah platform yang sangat baik untuk memupuk penglibatan kepelbagaian di kalangan pelajar siswazah. Terdapat banyak kajian mencadangkan bahawa melalui penglibatan dalam kepelbagaian, ia akan meningkatkan pelbagai hasil pembelajaran, termasuk rasa tanggungjawab sivik.

Kajian ini menganalisis hubungan antara tahap penyertaan dalam aktiviti kepelbagaian kurikulum, aktiviti kokurikulum, tahap iklim kampus, tahap penyertaan dalam interaksi bermakna dengan tanggungjawab sivik. Akhirnya, ia menguji tahap interaksi bermakna sebagai moderator antara hubungan tahap penyertaan dalam kurikulum, kokurikulum dan tanggungjawab sivik di kalangan pelajar yang berbeza etnik di enam universiti di Malaysia. Dengan menggunakan pensampelan secara purposive, 1420 responden terlibat dalam kajian ini. Kajian melalui soal selidik digunakan dalam kajian ini.

Konsep Pemodelan Persamaan Struktural (SEM) dengan menggunakan perisian "Partial Least Square (PLS) dan SPSS digunakan untuk menguji hubungan antara konstruk dalam kajian ini.

Kajian mendapati bahawa kurang daripada 25 peratus pelajar mempunyai tahap penyertaan yang tinggi dalam aktiviti kurikulum dan kokurikulum. Lebih daripada 80 peratus pelajar bersetuju bahawa rasa tanggungjawab sivik adalah penting kepada

mereka. Kajian ini juga mendapati aktiviti penglibatan kepelbagaian kokurikulum, iklim kampus dan interaksi bermakna mempunyai hubungan yang signifikan dengan tanggungjawab sivik. Walau bagaimanapun, aktiviti penglibatan kepelbagaian kurikulum tidak mempunyai hubungan dengan tanggungjawab sivik. Interaksi bermakna tidak mempunyai kesan penyerderhanaan terhadap hubungan antara aktiviti penglibatan kepelbagaian kokurikulum dengan tanggungjawab sivik. Walau bagaimanapun, ia mempunyai kesan penyerderhanaan terhadap aktiviti penglibatan kepelbagaian kurikulum dengan tanggungjawab sivik. Kajian ini memberikan maklumat yang berguna untuk memahami lebih lanjut mengenai tahap penyertaan pelajar dalam aktiviti penglibatan kepelbagaian dan persepsi mereka terhadap tanggungjawab sivik. Kajian ini juga boleh digunakan oleh universiti untuk membangunkan aktiviti penglibatan dalam kurikulum dan kokurikulum yang lebih sesuai dan meningkatkan iklim kampus yang menyokong kepelbagaian.

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This dissertation is dedicated to friends on the path of education, who are looking forthe betterment of humanity through education and communication.

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

CDEA Curricular Diversity Engagement Activity

CCDEA Co-curricular Diversity Engagement Activity

CC Campus Climate

MI Meaningful Interaction

DE Diversity Engagement

UKM Universiti Kebangsaan Malaysia

UPM Universiti Putra Malaysia

UM Universiti Malaya

UNITEN University Tenaga Nasional

USM Universiti Sains Malaysia

UTM Universiti Teknologi Malaysia

CHAPTER 1

INTRODUCTION

In the 21st century, ethnic and racial diversity has become an essential focus in higher education in tandem with increased registration of multicultural students. Higher education continues to have more racially and ethnically diverse set of individuals' enrolments. It has the responsibility to prepare graduates to contribute to society (Bowen, 1977). At the same time, to produce competent graduates to fulfil workforce needs (Engberg, 2007).

Programs and initiatives are needed to respond to multi-ethnicity needs in curriculum and co-curriculum. Institutions need to design a program that helps students increasetheir multicultural competencies and acquire skills they need as leaders in diverse societies (Banks, 1993; Bank et al., 2005).

There is a need for higher education to improve campus climates and outcomes for students. Previous research has identified factors such as campus environment, typeof institution and organizational characteristics influencing outcomes for college students (Pascarella & Terenzini 1991, 2005). Organizational characteristics such as communication, fairness in application, involving studentsin decision making.

Research also indicates that students from different ethnicities and races possess different worldviews (Hurtado et al., 1999). The fundamental strategy is to provide mechanisms for academic, social and financial support.

1.1 Background of the Study

Malaysia's universities have a role to play in an ethnic combination of academic, administrative, security, and maintenance staff as it is a multiracial country. It is therefore important for the campus to be conducive to fostering diversity, thereby enhancing students' critical thinking and intellectualism.

In Malaysia Education Development Plan 2015-2025 (Higher Education) Malaysia universities are being reformed to be in accord with the national policy. In order to cultivate an environment within universities that is in line with diversity, liberty of expression, critical thinking, creative mentality, organizational culture and environment is crucial.

Generally, there are two types of universities in Malaysia which are public and private universities. It comprised of domestic private universities and Malaysia branches of foreign universities. Both types of universities have different philosophies, structure and culture in pursuit of meritocracy.

The universities' general mission statements always focus on producing graduates who will be skilled and highly sought after by the industry. It brings together a diverse intellectual community and demands knowledge and education for improvement — the holistic path of the individual and society.

Both private and public universities are under the university ranking scrutiny. There are World University Ranking, QS International University Rankings and Domesticranking system SETAR by Malaysian Qualifications Agency (MQA). Both private and public universities are striving to achieve their full potential to produce undergraduates that fulfil the requirements of the 21st-century workforce.

In an educational context, the university has a role to play to prepare the undergraduates to be a well-rounded citizen. There are many studies showings that diversity engagement in university brings many positive outcomes.

There is a wealth of research on how diversity affects undergraduate students. Research used theoretical frameworks grounded in psychology to explain the processwhere students from racially and socially homogenous pre-college environment interact with diverse others. Gurin, Dey, Hurtado and Gurin (2002) have claimed this challenges students' notions of their diverse peers.

Twenty-first century college student diversity outcomes is a term used to describe the skills necessary for undergraduates to function in an increasingly diverse and interdependent global community, including being able to interact with diverse others and democratic and civic involvement abilities (Gurin et al., 2002, 2003; Chang, Astin, and Kim, 2004; Chang, Denson, Saenz, & Misa; 2006; Hurtado, 2003). Gurin et al. (2002), Chang (1996), and others (Nelson-Laird, Engberg, & Hurtado, 2005; Saenz, Ngai, Hurtado, 2007) have documented the educational value of diversity for both cognitive and social outcomes.

Research is needed to look into the educative value of diversity due to the changing demographics in higher education and globalization. Research on diversity engagement and educational value of diversity must be context-specific, including institutional type, state, and region. (Angela Mosi Locks, 2008).

Many dimensions shape diversity engagement on campus. Researchers argued thata supportive campus is essential for racial and ethnic diversity. As the campus climatefor racial and ethnic diversity has implications for student learning and a number of additional college outcomes (Milem, Chang, and Antonio, 2005).

When campus practices inclusion of diversity, many curriculum, co-curriculum initiatives may be included to foster racial and ethnically inclusive environment. For example, curricular initiatives include instituting a diversity course as a graduation requirement, for co-curricular may include living-learning programs, intergroup relation program, which may lead to the developing of civicresponsibility.

As such, campus demonstrated commit in all these commitment in concrete ways with initiatives to support intergroup relations programs, culturally related residencehalls, and co-curricular activities. Each of these initiatives will bring implications to undergraduates in the way how they deal with diverse others. Students' tolerance of diverse others and willingness to work collectively with diverse others will develop a sense of empathy and make them more likely to developcivic responsibility on campus, one of the democratic skills.

1.2 Statement of the Problem

Globalization is happening in the 21st century. With the advancement of AI and workforce flow from one country to another, it also means international competitionis unavoidable for future graduate. Higher education has theresponsibility to prepare graduates to contribute to society (Bowen, 1977). At the same time, to produce competent graduates to fulfil workforce needs (Engberg, 2007).

Besides, Malaysia is a multiethnic, multicultural society with a population of 32 million. The Malays are the largest ethnic group, followed by Chinese, Indians and others. Malay is the official language. Other major languages include Chinese, English, Tamil, Iban in Sarawak and Banjar in Sabah. There are about 140 languagesspoken in Malaysia, 40 of them are found in peninsular Malaysia, 54 in Sabah and 46 in Sarawak. (Economist Intelligence Unit, 2018)

Worth mentioning is that nearly fifty years after the unfortunate May 13 incident in Malaysia, little effort was made by the authorities to unveil the truth and to work toward national reconciliation. Since then, the political leaders on a regular basis used the May 13 incident as a threat to opposition whom trying to disputing civil rights. In recent years it has become increasingly clear that racial imbalance, inequality and tension are in urgent need of change (Kua, 2005). As undergraduates are the future of Malaysia, is important to understand the level of diversity engagement among different ethnicity and their level of civic responsibility.

According to Tamam and Abdullah (2012), in their study which studies the relationship between ethnic interactions and educational outcome among undergraduate students, the findings showed a significant positive association. Moreresearch needs to be carried out to examine the relationship between ethnic interaction and educational outcomes among undergraduate students.

Studies have shown positive effects on diversity experiences of students'educational outcomes. Nevertheless, lack of research has examined the influence moderating variables to understanding the implication of diversity experiences for racial and ethnic diversity. Higher education is the one of the suitable locations for the students to connected with diverse activities and develop better civic responsibility. University is a final stop to inspire student to become responsible citizen.

A number of studies in western have found that the nature of university engagementsuch as curricular diversity engagement, co-curricular diversity engagement, campusclimate enhances civic responsibility. However, there are limited studies done on this relationship in the Malaysia context. Therefore, this study intended to fill this gap by examining the relationship of civic responsibility, particularly with curricular diversity engagement, co-curricular diversity engagement, and campus climate.

Studies on diversity experience suggested that it is not a straightforward process. It can be influenced by other factors which can be moderating or mediating the process. As such, it might overestimate the effects of diversity experience oneducation outcomes (Bowman, 2011; Petttigrew and Tropp 2008).

Past studies included control variables such as demographic details, college experiences and other variables to accurately measure the implications of diversity engagement on educational outcomes. Some included mediating and moderating variables on the relationship of diversity engagements with educational outcomes.

In this study, it integrated meaningful interaction as a moderating variable into the relationship. This is to understand the relationship between diversity engagement and civic responsibility. Specifically, the relationship between curricular diversity engagement activities, co-curricular diversity engagement activity with civic responsibility.

Meaningful interactions with diverse others refer to interaction that goes beyond students merely interacting with one another across racial and ethnic groups. These interactions must be substantive and meaningful if they are to mediate perceived racial tensions on campus and anxiety with diverse peers (Angela Mosi Locks, 2008).

If a relationship between meaningful interaction with peers and diverse participation curricular and co-curricular diversity programs could be established, it would serve as further proof in support of the educational benefits of diversity engagement.

Therefore, this study aims to fill the gap by examining the relationship of the level of participation of curricular diversity engagement activity, co-curricular diversity engagement activity, level of campus climate, and level of participation in meaningful interaction with civic responsibility.

To further understand the relationship, an assumed moderating variable, which is meaningful interaction is integrated into this study. Past studies have indicate that the relationship of diversity engagement and civic responsibility as an educational outcome is not a straight forward process, as often it is complicated. Therefore, this study is intended to empirically test the moderating variable in the relationship of diversity engagement with civic responsibility. In response to the problems discussed above, the following research objectives guide this study.

1.3 Research Questions

In summary, the research questions that will be answered in this study are;

- 1. What is the level of participation of curricular diversity engagement activitiesamong local undergraduate students?
- 2. What is the level of participation of co-curricular diversity engagement activities among local undergraduate students?
- 3. What is the level of perceived campus climate among local undergraduate students?
- 4. What is the level of perceived civic responsibility among local undergraduate students?
- 5. What is the level of participation in meaningful interaction among local undergraduate students?
- 6. What is the relationship between variables level of participation in curricular diversity engagement activities, level of participation in co-curricular diversity engagement activities, level of campus climate, and level of participation in meaningful interaction with civic responsibility?
- 7. Do the variable meaningful interaction moderate the relationship between the level of participation in curricular diversity engagement activity and level of participation in co-curricular diversity engagement activity with the level of civic responsibility among undergraduates?
- 8. How much does the level of participation in curricular diversity engagement activity, level of participation in co-curricular diversity engagement activity, level of campus climate, and level of participation in meaningful interaction contribute towards civic responsibility?

1.4 Research Objectives

This research is to examine the moderating role of meaningful interaction on the relationship of civic responsibility with participation of diversity engagement activities and campus climate. Below are the objectives of this research:

- 1. To determine the level of participation of curricular diversity engagement activityamong local undergraduate students.
- 2. To determine the level of participation of co-curricular diversity engagement activityamong local undergraduate students.
- 3. To determine the level of perceived campus climate among local undergraduate students.
- 4. To determine the level of civic responsibility among local undergraduate students.
- 5. To determine the level of participation in meaningful interaction among local undergraduate students.
- 6. To determine the relationship of level of participation in curricular diversity engagement activities, level of participation in co-curricular diversity engagement activities, level of campus climate, and level of participation in meaningful interaction with civic responsibility.
- 7. To determine the moderating effect of the level of participation of meaningful interaction on the relationship of level of participation in curricular diversity engagement activity and level of participation in co-curricular diversity engagementactivity with level of civic responsibility.
- 8. To determine the contribution of level of participation in curricular diversity engagement activity, level of participation in co-curricular diversity engagement activity, level of campus climate, and level of participation in meaningful interactiontowards civic responsibility.

1.5 Significance of Study

This study is very important because it is examining the relationship between civic responsibility and diversity engagement which focus on multiethnic Malaysians in the context of education.

In the past, there are some studies that investigated civic outcomes from an educational perspective. The concept of examining diversity engagement'sinfluence on civic outcomes was rarely used in Malaysia context (Ong et al., 2016; Seyedali etal., 2016). Ezhar Tamam et al. (2016) did a study on predict civic responsibility from the involvement of culturally related diversity and peer civic talks among final year students. However, in the study the scholar did not use meaningful interaction as a moderator. Instead it was used as a variable to test direct relationship with civic responsibility. Besides, campus climate was not included as variable in the study.

Therefore, this study contributes to the literary body on diversity engagement on campus in a few ways. First, it examined the level of participation in curricular diversity engagement activity, co-curricular diversity engagement activity, level of campus climate, level of participation in meaningful interaction, particularly in undergraduate campus experience, which is under-explored area.

Secondly, it tested a specific dimension of diversity engagement, which is the qualityor positive aspect of the engagement. This study has studied the relationshipbetween independent variables and their impact on civic responsibility.

Third, the study attempted to examine roles of meaningful interaction as a moderating variable in the relationship of diversity engagement with civic responsibility. Very few past studies have been consolidated moderating variable into the relationship mentioned above.

Fourth, the result of this study can be theoretically confirming the robustness of the Allport's contact theory and Accentuation theory in a different context. While, Accentuation theory emphasizes on peer's activities among the college student as one of the main factors, this study narrows down to the importance of meaningful interaction. Allport contact theory, which was developed in an individualistic setting, the relationship in predicted to yield positive results which would extend the generalization of the claim within collectivistic setting. This study can, therefore help the dynamism and evolution of these two theories.

Fifth, Using Structural Equation Modelling (SEM) method, this study would methodologically help to overcome limitations of other methods of analysis most commonly used in social sciences studies. Therefore, using other methods of analysis would often results in less clear conclusions, and would require several separate analyses.

Through knowing the level of participation in curricular diversity engagementactivity and co-curricular diversity engagement activity among undergraduates, the finding is particularly useful for university to enhance curricular and co-curricular aspects. Besides, an understanding of the level of campus climate perceived by students can provide insight for universities to better foster a conducive environment.

All these are the practical aspects that are significant in this study. Finally, this studywill also contribute to the theoretical aspects by testing the conceptual framework used in this study.

1.6 Scope and Limitation of Study

First, scope of the research is limited to local undergraduate students at six institutions of higher learning in Malaysia. Second, undergraduate students are appropriate targets in view of the literature by Erikson (1946, 1956) that mentions that "psychosocial moratorium" of an undergraduate is at the developmental stage. Therefore, this study is confined to third- or fourth-year students so that they have sufficient campus experience to answer the survey questions.

This study examines a phenomenon within the institutional context for a particular population of student and focused on five public campuses and one private campus. Hence the findings of the study cannot be generalized to reflect the experiences of the current population.

This study did not include pre-college experiences. According to Gurin et al.(2002), pre-college experiences may reinforce predisposition in students' understanding of specific values and the formation of attitudes.

Also, the conceptualization of campus climate for diversity and assessing institutional devotion to the racial and ethnic diversity model suggests that the idealdata set to evaluate diversity would be both student and institutional survey data (Hurtado et al. 1999). However, for this study, research only used student asrespondents. This study based on individuals who completed the survey on behalf of their institution.

This research covers five relevant variables as in the conceptual framework. Other variables could also contribute to the determinants of civic responsibility but not included in this study.

This research uses the questionnaire as an instrument, it might be biased in the way student answer the questions. Finally, this is not a longitude study, and it cannot differentiate the level of diversity engagement before student enrolment to university and after enrolment to university.

1.7 Definition of Terms

To avoid confusion in the conceptual interpretation of variables used, the definitions of terminologies used in this study presented in table 1.1 below. These definitions used as a guide in discussing the findings of tested hypotheses.

Table 1.1 : Operational definitions

No	Variable	Operational definition	Source
1	Curricular diversity	Level of participation in diversity concerning ideas and people through coursework oncampus and off-campus activities.	Gurin et al., 2002
2	Co- curricular diversity	Level of participation in diversity for ideas and people voluntarily through unstructured programmed outside of coursework, on- campus and off-campus activities.	Gurin et al., 2002
3	Campus climate	Students general view of educational experiences and interethnic relations on the campus.	Milem et al., 2005
4	Civic responsibility	Personal belief and feeling that individuals have about their responsibility and duty to society.	Denson & Brown, 2013
5	Meaningful interaction	Frequency of interaction that occurs during the ordinary course of undergraduate life with diversestudents (different in ethnicity, nationality, values etc.) in various communicating settings.	Milem et al., 2005

1.8 Summary

This chapter has given the importance of research by presenting the fundamentals background of the study, problem statement, research questions, objectives and significance of the study, scope and limitations. The subsequent chapter will discuss relevant literature that form the research framework.

REFERENCES

- Adan, A. M., & Felner, R. D. (1995). Ecological congruence and adaptation of minority youth during the transition to college. *Journal of Community Psychology*, 23, 256-269.
- Ahrari, S., Abu, B., Hj, S., Hassan, B., Wahiza, N., Wahat, A., & Zaremohzzabieh, Z. (2016). Deepening critical thinking skills through civic engagement in Malaysian higher education. *Thinking Skills and Creativity*, 22, 121–128. https://doi.org/10.1016/j.tsc.2016.09.009
- Ahrari, S., Bt, J., & Salleh, O. (2017). Using Network-Based Theory to Develop a Curriculum for Citizenship Education in Higher Institutions. *Social Indicators Research*, 130(3), 1207–1228. https://doi.org/10.1007/s11205-016-1242-4
- Allison, P. D. (2002). Missing data. Thousand Oaks, CA: Sage Publications.
- Allport, G. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley Publishing.
- Altbach, P. G., Lomotey, K., & Kyle, S. R. (1999). Race in higher education: The continuing crisis. In P.G. Altbach, R. O. Berhahl, & P. J. Gumport, (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (pp. 448 466). Baltimore: John Hopkins University Press.
- Angela Mosi Locks. (2008). Institutional Commitment to Policies and Practies that Support Racial and Ethnic Diversity in the Post-Affirmative Action Era: Examining Sense of Belonging and Diversity Engagement, PhD Thesis, The University of MiChigan.
- Anglin, A. E., Johnson-Pynn, J. S., & Johnson, L. R. (2012). Ethnic identity and civic attitudes in Latino and Caucasian youth. *Journal of Youth Studies*, 15(5): 621 643. http://doi.org/10.1080/13676261.2012.663887
- Antonio, A. L. (2004). The influence of friendship groups on intellectual self- confidence and educational aspirations in college. *Journal of Higher Education*, 75(4), 446-471.
- Antonio, A. L., Chang, M. J., Hakuta, K., Kenny, D. A., Levin, S., & Milem, J. F. (2004). Effects of racial diversity on complex thinking in college students. *Psychological Science*, 75(8), 507-510.
- Aspinwall, L. G. and Taylor, S.E. (1992). Modeling cognitive adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality & Social Psychology*, 63(6), 989-1003.

- Astin, A. W. (1993). What matters in college: Four critical years revisited. San Francisco: Jossey-Bass.
- Bandalos, D. L. (2002). The effects of item parceling on goodness-of-fit and parameter estimate bias in structural equation modeling. *Structural Equation Modeling*, 9(1), 78-102.
- Banks, J. A. (1993). Multicultural education: Historical development, dimensions, and practice. *Review of Research in Education*, *19*, 3-49.
- Banks, J. A. Cookson, P., Gay, G., Hawley, W. D., Irvine, J. J., Nieto, S., Schofield, J.W., & Stephan, W. G. (2005). Education and Diversity. *Social Education*, 69(1), 36.
- Bataille, G., Carranza, M.A., & Lisa, L. (1996). Ethnic Studies in the United States: A Guide to Research. New York: Garland Publishers.
- Bauman, G., Bustillos, L., Bensimon, E., Brown, M. C, & Bartee, R. (2005). Achieving equitable educational outcomes with all students: The institution's role and responsibilities. Retrieved April 23,2007 from the Association of American Colleges and Universities website: http://:www.aacu.org/inclusive_excellence/
- Bean, J. P. (1980). Dropouts and turnover: The synthesis and test of a causal model of students attrition process. *Research in Higher Education*, *12*, 155-187.
- Bean, J. P. (1983). The application of a model of turnover in work organizations to the student attrition process. *Review of Higher Education*, 12, 155-182.
- Bensimon, E. M. (2004). The diversity scorecard: A learning approach to institutional change. *Change*, 37(1), 44-52.
- Bentler, P. M, & Bonnett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606.
- Bentler, P. M. (1990). Comparative fit indices in structural models. *Psychological Bulletin*, 107(2), 238-246.
- Bentler, P. M. (2006). EQS 6: Structural Equation Program Manual. Encino, CA: Multivariate Software.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit inthe analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606.
- Bentler, P.M., & Wu, E. J. C. (2002). *EQS 6 for Windows User's Manual*. Encino, CA: Multivariate software.
- Berger, J. B. (2000). Organizational behavior at college and student outcomes: Anew perspective. *Review of Higher Education*, 23(2), 177-198.

- Berger, J. B., & Braxton, J. M. (1998). Revising Tinto's interactionalist theory of Student departure through theory elaboration: Examining the role of organizational attributes in the persistence process. *Research in Higher Education*, 39(2), 103-119.
- Bettencourt, B. A., Charlton, K., Eubanks, J., Kernahan, C, & Fuller, B. (1999).

 Development of Collective Self-Esteem Among Students: Predicting Adjustmentto College. *Basic and Applied Psychology*, 21(3), 213-222.
- Bloom, A. (1987). The closing of the American mind. Simon & Schuster New York.
- Bollen & J. S. Long (Eds.) Testing structural equation models. Newbury Park, CA, Sage.
- Bollen, K. A. (1989). Structural equations with latent variables (pp. 40-79). New York: Wiley.
- Bolman, L., & Deal, T. (2003). *Reframing Organizations* (3rd ed.). San Francisco: Jossey Bass.
- Bowen, H. R. (1977). Goals: The intended outcomes of higher education, In *Investment in learning*. San Francisco: Jossey-Bass.
- Bowman, N. A. (2011). Promoting Participation in a Diverse Democracy: A Meta-Analysis of College Diversity Experiences and Civic Engagement. *Review of Educational Research*, Vol. 81. http://doi.org/10.3102/0034654310383047
- Bowman, N. A. (2012). Promoting sustained engagement with diversity: The reciprocal relationships between informal and formal college diversity experiences. *The Review of Higher Education*, 36 (1): 1 24. https://doi.org/10.1353/rhe.2012.0057
- Braxton, J. M., & Mundy, M. E. (2001). Powerful institutional lever to reduce college student departure. *Journal of College Student Retention*, 3(1), 91-118.
- Browne, M. W., & Cudek, R. (1993). Alternative ways of assessing model fit. In J. A.
- Bryman, A. (2012). Social research methods (4th ed.). Oxford, United Kingdom: Oxford University Press.
- Byrne, B. M. (2006). Structural equation modeling with EQS and EQS/Windows: Basic concepts, applications, and programming (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Byrne, B. M. (2016). Structural equation modeling with AMOS: Basic concepts, applications, and programming (3rd ed.). Abingdon, OX: Routledge, Taylor & Francis Group.

- Cabrera, A. F., Nora, A., & Castaneda, M. B. (1992). The role of finances in the persistence process: A structural model. *Research in Higher Education*, 53(5), 571-593.
- Cabrera, A. F., Nora, A., Terenzini, P. T., Pascarella, E. T., & Hagedorn, L. S. (1999). Campus racial climate and the adjustment of students to college: A comparison between White students and African-American students. *Journal of Higher Education*, 70(2), 134-160.
- Cain, M. K., Zhang, Z., & Yuan, K.-H. (2017). Univariate and multivariate skewnessand kurtosis for measuring nonnormality: Prevalence, influence and estimation. Behavior research methods, 49(5), 1716-1735.
- Carter, D. F., Locks, A. M., Winkle-Wagner, R., & Pineda, D. (2006, April). From when and where I enter: Theoretical and empirical considerations of minority students' transition to college. Paper presented at American Educational Research Association Annual Meeting, San Francisco, California.
- Chang, M. J. (1996). Racial diversity in higher education: Does a racially mixed student population affect educational outcomes'? Unpublished doctoral dissertation, University of California, Los Angeles.
- Chang, M. J. (2003). Racial differences in viewpoints about contemporary issues among entering college students: Factor or Fiction? *NASPA Journal*, 40(A), 55-71.
- Chang, M. J., & DeAngelo. (2002). Going Greek: The effects of racial composition on white students' participation patterns. *Journal of College Student Development*, 43(6), 809-823.
- Chang, M. J., Astin, A. W., & Kim, D. (2004). Cross-racial interaction among undergraduates: Some consequences, causes, and patterns. *Research in Higher Education*, 45(5): 529–553. https://doi.org/10.1023/B:RIHE.0000032327.45961.33
- Chang, M. J., Denson, N., Saenz, V., & Misa, K. (2006). The educational benefitsof sustaining cross-racial interaction among undergraduates. *Journal of Higher Education*, 77(3), 430-455.
- Chavous, T. A (2005). An intergroup contact-theory framework for evaluating racial climate on predominantly white college campuses. *American Journal of Community Psychology*, 35(3-4), 239-257.
- Checkoway, B. (2001). Renewing the civic mission of the American researchuniversity. *Journal of Higher Education*, 72(2), 145-147.
- Chesler, M. (2002). Effective multicultural teaching in research universities. In J. Chin, C. W. Berheide, & D. Rome (Eds.), *Included in Sociology: Learning climate that cultivate racial and ethnic diversity*. Washington, DC: American Association for Higher Education.

- Chesler, M., Lewis, A. E., & Crowfoot, J. E. (2005). *Challenging racism in higher education: Promoting justice*. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. Modern methods for business research, 295(2), 295-336.
- Choi, K. H. (2002). Psychological separation-individuation and adjustment to college among Korean American students: The roles of collectivism andindividualism. *Journal of Counseling Psychology*, 49(4), 68-75.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences Hillsdale, New Jersey: Lawrence Earlbaum Associates.
- Cohen, J. (1992). A power primer. Psychological bulletin, 112(1), 155.
- Colebeck, C. L. (2002). Assessing institutionalization of curricular and pedagogical reforms. *Research in Higher Education*, 43(4), 397-421.
- Committee on Economic Development. (2005, May). Cracks in the educational pipeline. "A business leader's guide to higher education reform. Washington, DC. Cooper, D. R., & Schindler, P. S. (2014). Business research methods (12th ed.). NewYork, NY: McGraw-Hill/Irwin.
- Coser, R. (1975). The complexity of roles as a seedbed of individual autonomy. In J. A. Coser (Ed.), *The idea of social structure: Papers in honor of Robert K. Merton* (pp. 85-102). New York, NY: Harcourt Brace Jovanovich.
- Davis, M., Dias-Bowie, Y., Greenberg, K., Klukken, G., Pollio, H. R., Thomas, S. P., et al. (2004). "A fly in the buttermilk": Descriptions of university life bysuccessful black undergraduate students at a predominately white southeastern university. *Journal of Higher Education*, 75(4), 420-445.
- De Vaus, D. (2002). Surveys in social research (5th ed.). New South Wales, Australia: Allen & Unwin.
- Dempster, A. P., Laird, N. M., & Rubin, D. B. (1977). Maximum likelihood from incomplete data via the EM algorithm. *Journal of the Royal Statistical Society, B,* 39,1-38.
- Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management, 17*(4), 263-282.
- Dill, D. D. (1984). The nature of administrative behavior in higher education. *Educational Administration Quarterly*, 20(3) 69-99.
- Doolittle, A., & Faul, A. C. (2013). Civic Engagement Scale: A Validation Study. SAGE Open, 3(3): 1–8. http://doi.org/10.1177/2158244013495542

- D'Souza, D. (1991). Illiberal education. New York: The Free Press.
- Duderstadt, J. J. (2000). A university for the 21s' century. Ann Arbor, MI: University of Michigan Press.
- Engberg, M. (2004). Educating the workforce for the 21st century: The impact of diversity on undergraduate students' pluralistic orientation. (Doctoral dissertation, University of Michigan, 2004). *Dissertation Abstracts International, DAI-A* 65/06, 2111.
- Engberg, M. (2007). Educating the workforces for the 21st century: A cross-disciplinary analysis of the impact of the undergraduate experiences on students' development of a pluralistic orientation. *Research in Higher Education*, 48(2), 283-317.
- Engberg, M. E., & Mayhew, M. J. (2007). The Influence of first-year "success" courses on student learning and democratic outcomes. *Journal of College Student Development*, 48(3): 241–258. http://doi.org/10.1353/csd.2007.0023
- Erickson, E. (1946). Ego development and historical change. *Psychoanalytic Study of the Child*, 2, 359-396.
- Erickson, E. (1956). The problem of ego identity. *Journal of American Psychoanalytic Association*, 4, 56-121.
- Falk, R. F., & Miller, N. B. (1992). A primer for soft modeling. Akron, OH: University of Akron Press.
- Feagin, J. R. (2002). *The continuing significance of racism: U.S. colleges and universities.* American Council on Education Report. Washington, D.C.
- Feldman, K. & Newcomb, T. (1969). *The impact of college on students*. SanFrancisco: Jossey-Bass.
- Field, A. (2009). Discovering statistics using SPSS (3rd ed.). London, UnitedKingdom: SAGE Publications Ltd.
- Field, A. (2018). Discovering statistics using IBM SPSS Statistics (5th ed.). London, United Kingdom: SAGE Publications Ltd.
- Flowers, L. A. (2003). Effects of college racial composition on African American students' interactions with faculty. *College Student Affairs Journal*, 23(1), 54-63.
- Ford, & G. B. Flamer (Eds.) *Measurement and Piaget* (pp.1-111). New York: McGraw-Hill.
- Fornell, C., & Cha, J. (1994). Partial least squares. Advanced methods of marketing research, 407(3), 52-78.

- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing research, 18(1), 39-50.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). How to design and evaluate research in education (8th ed.). New York, NY: McGraw-Hill Companies, Inc.
- Freeman, K. (1997). Increasing African Americans' participation in higher education: African American high-school students' perspectives. *Journal of Higher Education*, 68(5), 523-550.
- Fulford, C. N., Coomes, M. D., & Knight, W. E. (2009). Preparing students to workin a globally diverse world: the relationship of college students 'backgrounds and college experiences to their orientation toward diversity. Retrieved from http://igr.umich.edu/files/igr/Diversity and Higher Education.pdf
- Gaskin, J. (2017). Data screening. Gaskination's StatWiki. Retrieved from http://statwiki.kolobkreations.com/index.php?title=Data_screening
- Gefen, D., Straub, D., & Boudreau, M.-C. (2000). Structural equation modeling and regression: Guidelines for research practice. Communications of the association for information systems, 4(1), 7.
- Geisser, S. (1975). The predictive sample reuse method with applications. Journal of the American Statistical Association, 70(350), 320-328.
- Gloria, A. M, Hird, J. S., & Navarro, R. L. (2001). Relationships of cultural congruity and perceptions of the university environment to help-seeking attitudes by sociorace and gender. *Journal of College Student Development*, 42(6), 545-562.
- Gold, A. H., Arvind, M., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. Journal of Management Information Systems, 18(1), 185-214.
- Gratz et al, v. Bollinger et al, 539 U.S. (2003).
- Gratz et al, v. Bollinger et al, 530 U.S. (2003).
- Green, P. E. (2001). The policies and politics of retention and access of African-American students in public White institutions. In L. Jones (Ed.), *Retaining African Americans in higher education*. *Challenging paradigms for retaining students, faculty & administrators* (pp. 45-58). Sterling, VA: Stylus Publishing
- Gumport, P. J., & Bastedo, M. N. (2001). Academic stratification and endemic conflict: Remedial education policy at CUNY. *Review of Higher Education*, 24(A), 333-349.

- Gurin, P., & Nagda, B. a. (2006). Getting to the what, how, and why of diversity on campus. *Educational Researcher*, 35(1), 20–24. https://doi.org/10.3102/0013189X035001020
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity and highereducation: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330-366.
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Theory and Impact on Educational Outcomes. *Harvard Educational Review*, 72(3), 330–366. http://igr.umich.edu/files/igr/Diversity and Higher Education.pdf
- Gurin, P., Dey, E., Gurin, G., & Hurtado, S. (2003). How does racial/ethnic diversity promote education. *Western Journal of Black Studies*, *27*(1), 20-29.
- Gurin, P., Dey, E., Gurin, G., Hurtado, S. (2003). Western Journal of Black Studies, 27(1), 20-29.
- Gutmann, A. (1987). The purposes of higher education in Democratic education. Princeton, NJ: Princeton University Press.
- Hahn, E. D., & Ang, S. H. (2017). From the editors: New directions in the reporting of statistical results in the Journal of World Business: Elsevier.
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). Multivariate data analysis: A global perspective (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hair, J. F., Babin, B. J., & Krey, N. (2017). Covariance-based structural equation modelling in the Journal of Advertising: Review and recommendations. Journal of Advertising, 46(1), 163-177.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). A primer on partialleast squares structural equation modeling (PLS-SEM) (1st ed.). Thousand Oaks, CA: SAGE Publications Inc.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partialleast squares structural equation modeling* (PLS-SEM) (2nd ed.). Thousand Oaks, CA: SAGE Publications Inc.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing theory and Practice, 19(2), 139-152.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and howto report the results of PLS-SEM. European Business Review, 31(1), 2-24.
- Hatter, D. Y., & Ottens, A. J. (1998). Afrocentric world view and Black students' adjustment to a predominantly White university: Does worldview matter? *College Student Journal*, 52(3), 472-480.

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115-135.
- Hoffman, M., Richmond J., Morrow, J., & Salomone, K. (2002). Investigating "Sense of Belonging' in first-year college students. *Journal of College Student Retention*, 4(3), 227-256.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(4), 1-55.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. Strategic management journal, 20(2), 195-204.
- Hurtado, S. (1992). The campus racial climate Contexts of conflict. *Journal of Higher Education*, 63(5), 539-569.
- Hurtado, S. (2003). Preparing College Students for a Diverse Democracy: Final Report to the U.S. Department of Education, OERI, Field Initiated Studies Program. Ann Arbor, MI: Center for the Study of Higher and Postsecondary Education.
- Hurtado, S. (2003a). *Preparing college students for a diverse democracy: Final Report to the U.S. Department of Education, OERI, Field Initiated Studies Program.* Ann Arbor, MI: Center for the Study of Higher and PostsecondaryEducation.
- Hurtado, S. (2003b). *Spencer Report on Education for a Diverse Democracy Project.* Ann Arbor, MI: Center for the Study of Higher and Postsecondary Education.
- Hurtado, S. (2005). The next generation of diversity and intergroup relations research. *Journal of Social Issues*, 61(3), 595–610. https://doi.org/10.1111/j.1540-4560.2005.00422.x
- Hurtado, S. (2007). Linking Diversity with the Educational and Civic Missions of Higher Education. *The Review of Higher Education*, 30(2), 185–196. https://doi.org/10.1353/rhe.2006.0070
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70(4), 324-345.
- Hurtado, S., & Ponjuan, L. (2005). Latino educational outcomes and the campus climate. *Journal of Hispanic Higher Education*, 4(3), 235-251.
- Hurtado, S., Carter, D. F., & Kardia, D. (1998). The climate for diversity: Key issues for institutional self-study. *New Directions for Institutional Research*, 25(2), 53-63.

- Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *Review of Higher Education*, 21(3), 279–302. https://doi.org/10.1353/rhe.1998.0003
- Hurtado, S., Milem, J., Clayton-Pederson, A., & Allen, W. (1999). Enacting Diverse Learning Environments: Improving the Climate for Racial/Ethnic Diversity in Higher Education. *ASHE-ERIC Higher Education Report*, 26(8). Washington DC: The George Washington University.
- Jones, (2002). Creating an affirming culture to retain African-American students during the post affirmative action era in higher education. In *Retaining African Americans in higher education: Challenging paradigms for retaining students, faculty and administrators* (pp. 3-20). Stylus, Sterling Virginia.
- Joreskog, K. G. (1971). Simultaneous factor analysis in several populations, *Psychometrika*, 36(4), 409-426.
- Kalsner, L., & Pistole, M. C. (2003). College adjustment in a multiethnic sample: attachment, separation-individuation, and ethnic identity. *Journal of College StudentDevelopment*, 44(1), 92-109.
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
- Kline, R. B. (2011). Principles and practice of structural equation modeling: Guilford publications.
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2007). Piecing together the student success puzzle: Research, Propositions, and Recommendations. ASHE-ERIC Higher Education Report, Vol. 32, No. 5. Washington, DC: The George Washington University.
- La Belle, T, J., & Ward, C. R. (1996). *Ethnic studies and multiculturalism*, (pp. 93-114). Albany, NY. SUNY Press.
- Laird, T. F. N., Engberg, M. E., & Hurtado, S. (2005). Modelling Accentuation Effects: Enrolling in a Diversity Course and the Importance of Social Action Engagement. *The Journal of Higher Education*, 76(4), 448–476. https://doi.org/10.1353/jhe.2005.0028
- Lee, R. M., & Davis, C. (2000). Cultural orientation, past multicultural experience, and a sense of belonging on campus for Asian American college students. *Journal of College Student Development*, 41(1), 110-115.
- Langer, E. J. (1978). Rethinking the role of thought in social interaction. In J. Harvey, W. Ickes, & R. Kiss (Eds.), *New directions in attribution research* (Vol.3, pp. 35-38). Hillsdale, NJ: Erlbaum.

- Liu, O. P., Selvadurai, S., Hoon, O. P., Asyraf, M., & Mohd, A. (2016). EducationFor Social Cohesion: Promoting 1r + 3r, 11(2), 18–20.
- Liu, O. P., Selvadurai, S., Saibeh, B., Radzi, M. M., & Hamzah, S. A. (2017). Tracking the Pathways of Education in Malaysia: Roots and Routes, 9(10), 1–13. https://doi.org/10.5539
- Locks, A. M., Hurtado, S., Bowman, N. A., & Oseguera, L. (2008). Extending notions of campus climate and diversity to students' transition to college. *Review of Higher Education*, 31(3), 257-285.
- Loehlin, J. C. (1998). Latent variable models: An introduction to factor, path, and structural analysis (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- MacCallum, R. C, Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, *1*(2), 130.-149.
- Malaney, G. D., & Berger, J. B. (2005). Assessing how diversity affects students' interest in social change. *Journal of College Student Retention*, 6(4), 443-460.
- Mardia, K. V. (1970). Measures of multivariate skewness and kurtosis with applications. Biometrika, 57(3), 519-530.
- Mayhew, M. J., & Grunwald, H. E. (2006). Factors contributing to faculty incorporation of diversity-related course content. *Journal of Higher Education*, 77(1), 148-168.
- Mayhew, M. J., Grunwald, H. E., & Dey, E. L. (2005). Curriculum matters: Creatinga positive climate for diversity from the student perspective. *Research in Higher Education*, 46(4), 389-412.
- Mayhew, M. J., Grunwald, H. E., & Dey, E. L. (2006). Breaking the silence: Achieving a positive campus climate for diversity from the staff perspective. *Research in Higher Education*, 41(1), 63-88.
- Mayo, J. R., Murguia, E., & Padilla, R. V. (1995). Social integration and academic performance among minority university-students. *Journal of College Student Development*, 36(6), 542-552.
- McLachlan, G. J., & Krishnan, T. (1997). *The EM algorithm and extensions*. New York: Wiley.
- Mendoza-Denton, R., Purdie, V. J., Downey, G., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implications for African-American students' college experience. *Journal of Personality and Social Psychology*, 83(4), 896-918.

- Meredith, M. (2004). Why do universities compete in the ratings game? An empirical analysis of the effects of the US News and World Report college rankings. *Researchin Higher Education*, 45(5), 443-461.
- Milem, J. F., Chang, M. J., & Antonio, A. L. (2005). *Making diversity work on campus: A research-based perspective*. Retrieved from the Association of AmericanColleges and Universities website: http://www.aacu.org/inclusive excellence/
- Milem, J. F., Dey, E. L., & and White, C. B. (2004). Diversity considerations in health professions education. In B. D. Smedley, A. S. Butler, & L. R. Bristow (Eds.), *In the nation's compelling interest: Ensuring diversity in the health care workforce*, (pp. 345-390). Washington, DC: National Academies Press.
- Milem, J. F., Umbach, P. D., & Liang, C. T. H. (2004). Exploring the perpetuation hypothesis: The role of college and universities in desegregating society. *Journal of College Student Development*, 45(6), 688-700.
- Millem, J. F., & Umbach, P. D. (2003). The influence of pre-college factors on students' predispositions regarding diversity activities in college. *Journal of College Student Development*, 44(5), 611-624.
- Michelle Castellanos, Darnell Cole. (2015). Disentangling the Impact of Diversity Courses: Examining the Influence of Diversity Course Content on Students' Civic Engagement. *Journal of College Student Development*, Volume 56, Number 8, pp. 794-811. Retrieved from https://doi.org/10.1353/csd.2015.0089
- Mohanty, C. T. (1993). On race and voice: Challenge for Liberal Education in the 1990s. In H. A. Giroux & P. McLaren (Eds.), *Between borders: Pedagogy and the politics of cultural studies* (pp. 145-166). New York: Routledge.
- Morley, K. M. (2003). Fitting in by race/ethnicity: The social and academic integration of diverse students at a large predominantly White university. *Journal of College Student Retention*, 5(2), 147-174.
- Mounts, N. S. (2004). Contributions of parenting and campus climate to freshmen adjustment in a multiethnic sample. *Journal of Adolescent Research*, 19(4), 468-491.
- Nagda, B. A., Kim C, & Truelove, Y. (2004). Learning about difference, learning with others, learning to transgress. *Journal of Social Issues*, 60(1), 195-214.
- Nagda, B., & Zúñiga, X. (2003). Fostering meaningful racial engagement through intergroup dialogues. *Group Processes & Intergroup Relations*, 6(1), 111–128. https://doi.org/10.1177/1368430203006001015
- Nelson-Laird, T. F. (2005). College students' experiences with diversity and their effects on academic self-confidence, social agency, and disposition toward critical thinking. *Research in Higher Education*, 46(4), 365-387.

- Nelson-Laird, T. F., Engberg, M. E., & Hurtado, S. (2005). Modeling accentuation effects: Enrolling in a diversity course and the importance of social action engagement. *Journal of Higher Education*, 76(A), 448-476.
- Nettles, M. T., & Perna, L. W. (1997). *The African American education data book. Volume I: Higher and adult education.* Washington, DC: Frederick D. Patterson Research Institute of the College Fund/UNCF.
- Neville, H., & Furlong, M. (1994). The impact of participation in a cultural awareness program on the racial attitudes and social behaviors of first-year college students. *Journal of College Student Development*, *35*(5) 371-377.
- Newcomb, T. L. (1943). *Personality and social change: Attitude formation in a student community.* New York: Dry den Press.
- Nora, A. (2001). The depiction of significant others in Tinto's "Rites of passage": A reconceptualization of the influence of family and community in the persistence process. *Journal of College Student Retention*, 3(1), 41-56.
- Nunez, Ann-Marie. (2005). *Modeling college transitions of Latina/o students*. Unpublished doctoral dissertation, University of California, Los Angeles,
- Online Business Dictionary, B. D. (n.d.). Data screening. Easy-to-use free business glossary. Retrieved from http://www.businessdictionary.com/definition/data-screening.html
- Orfield, G., & Lee, C. (2006). Racial Transformation and the Changing Nature of Segregation. Cambridge, MA: The Civil Rights Project at Harvard University, The Civil Rights Project.
- Orfield, G., Bachmeier, M., James, D. R., & Eitle, T. (1997). Deepening segregationin American public schools: A special report from the Harvard Project on School Desegregation. *Equity and Excellence in Education*, 30(2), 5-24.
- Padgett, V. R., & Reid, J. F. (2002). Five year evaluation of the student diversity program: A retrospective quasi-experiment. *Journal of College Student Retention*, 4(2), 135-145.
- Pallant, J. (2016). SPSS survival manual: A step by step guide to data analysis using IBM SPSS (6th ed.). Maidenhead, United Kingdom: McGraw-Hill Education.
- Pascarella, E. T., & Terenzini, P. T. (1991). How college affects students: Findings and insights from twenty years of research. San Francisco, Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*, (2nd ed.). San Francisco, Jossey-Bass.

- Pascarella, E. T., Edison, M., Nora, A, Hagedorn, L. S., & Terenzini, P. T. (1996). Influences on students' openness to diversity and challenge in the first year of college. *Journal of Higher Education*, 67(2), 174-195.
- Pedhauzer, E. J., & Pedhauzer-Schmelkin, L. P. (1991). Measurement design and analysis: An integrated approach. Hillsdale, NJ: Laurence Erlbaum Associates. Peterson, M. W. (1974). Organization and administration in higher education: sociological and social-psychological perspectives. Review of Research in Education, 2, 296-347.
- Peterson, M., Blackburn, R. T., Gamson, Z., Arce, C. H., Davenport, R. W., & Mingle, J.R. (1978). *Black students on White campuses: The impacts of increased Black enrollments*. Ann Arbor: MI. Institute for Social Research, University of Michigan.
- Piaget, J. (1971). The theory of stages in cognitive development. In D. R. Green, M. P.
- Piaget, J. (1985). The equilibrium of cognitive structures: The central problem of intellectual development. Chicago: University of Chicago Press. (Original work published in 1975).
- Pike, G. R. (2002). The differential effects of on- and off-campus living arrangements on students' openness to diversity. *NASPA Journal*, *39*(4), 283-299.
- Pike, G. R., Kuh, G. D., & Gonyea, R. M. (2007). Evaluating the rationale for affirmative action in college admissions: Direct and indirect relationships between campus diversity and gains in understanding diverse groups. *Journal of College Student Development*, 48(2), 166-182.
- Powell, J. (2006). Diversity Merit, and Higher Education: Implications for Comprehensive Admission, Pipeline and Retention Strategies. Lecture, University of Michigan, March 10, 2006.
- Protinsky, H., & Gilkey, J. K. (1996). An empirical investigation of the constructof personality authority in late adolescent women and their level of college adjustment. *Adolescence*, 31(122), 291-295.
- Raithel, S., Sarstedt, M., Scharf, S., & Schwaiger, M. (2012). On the value relevanceof customer satisfaction. Multiple drivers and multiple markets. Journal of the Academy of Marketing Science, 40(4), 509-525.
- Raykov, T., Tomer, A., & Nesselroade, J. R. (1991). Reporting structural equation modeling results in Psychology and Aging: Some proposed guidelines. *Psychology and Aging, 6(4), 499-503.*
- Reason, R.D., &, Evans, N. J. (2007). New Directions for Student Services, 120, 67-75.

- Reid, L. D., & Radhakrishnan, P. (2003). Race matters: The relationship between raceand general campus climate. *Cultural Diversity & Ethnic Minority Psychology*, *9*(*3*), 263-275.
- Rendon, L. I., Jalomo, R. E., & Nora, A. (2000). Theoretical considerations in the study of minority student retention in higher education. In J. Braxton (Ed.) *Rethinking the Departure Puzzle: New Theory and Research on College Student Retention* (pp. 127-156). Vanderbilt University Press.
- Richardson, R. C, Jr., & Skinner, E. (1990). Adapting to diversity: Organizational influences on student achievement. *Journal of Higher Education*, 61(5), 485-511.
- Rigdon, E. E. (1995). A necessary and sufficient identification rule for structural models estimated in practice. *Multivariate Behavioral Research*, *30(3)*, 359-383.
- Rowley, L. L., Hurtado, S., & Ponjuan, L. (2005). *Institutional diversity: The disparities in higher education goals and outcomes*. Unpublished manuscript.
- Rowley, S. (2000). Profiles of African American college students' educationalutility and performance: A cluster analysis. *Journal of Black Psychology*, 26(1), 3-26.
- Saenz, T., Marcoulides, G. A, Junn, E., & Young, R. (1999). The relationship between college experiences and academic performance among minority students. *International Journal of Educational Management*, 13(4), 199-207.
- Saenz, V. B. (2005). Breaking the cycle of segregation: Examining students' pre college racial environments and their diversity experiences in college (Doctoral dissertation, University of California, Los Angeles, 2005). *Dissertation Abstracts International*. DAI-A 66/09.
- Saenz, V. B., Ngai, H. N., & Hurtado, S. (2007). Factors influencing positive interactions across race for African American, Asian, American, Latino, and White college students. *Research in Higher Education*, 48(1), 1-38.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). Research methods for business students (7th ed.). Harlow, United Kingdom: Pearson Education Ltd.
- Saylor, E. S., & Aries, E.. (1999). Ethnic identify and change in social context. *Journal of Social Psychology, 139(5),* 549-566.
- Schneider, M. E., & Ward, D. J. (2003). The role of ethnic identification and perceived social support in Latinos' adjustment to college. *Hispanic Journal of Behavioral Sciences*, 25(4), 539-554.
- Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach (7th ed.). Chichester, West Sussex, United Kingdom: John Wiley & Sons.

- Shaw, K. M. (1997). Remedial education as ideological battleground: Emerging remedial education policies in the community college. *Education Evaluation and Policy Analysis*, 19(3), 284-296.
- Shields, N. (2004). Understanding place-bound students: Correlates and consequences of limited educational opportunities. *Social Psychology of Education*, 7(3), 353-376.
- Smedley, B. D., Myers, H. F., & Harrell, S. P. (1993). Minority-status stresses and the college adjustment of ethnic minority freshmen. *Journal of Higher Education*, *64*, 434-452.
- Smith, D. G. (1989). The challenge of Diversity: Involvement or alienation in the academy? ASHE-ERIC Higher Education Reports, No. 5. Washington, D.C.: The George Washington University, Graduate School of Education and Human Development.
- Smith, D. G., Gerbrick, G. L., Figueroa, M. A, Harris Watkins, G., Levitan, T., Cradoc Moore, L, Merchant, P. A., Dov Beliak, H., & Figueroa, B. (1997). *Diversity works: The emerging picture of how students benefit.* Washington, DC: Association of American Colleges and Universities.
- Smith, D. G., Turner, C.S., Osei-Kofi, N., & Richards, S. (2004). Interrupting the usual: successful strategies for hiring diverse faculty. *Journal of Higher Education*, 75(2), 133-160.
- Solorzano, D. G., Ceija, M., & Yosso, T. J. (2001). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African Americancollege students. *Journal of Negro Education*, (59(1/2), 60-73.
- Sowell, T. (1987). A conflict of visions: Ideological origins of political struggles. New York: Quill/William Morrow.
- Springer, L., Palmer, B., Terenzini, P. T., Pascarella, E, T., & Nora, A. (1996). Attitudes toward campus diversity: Participation in a racial or cultural awareness workshop. *Review of Higher Education*, 20(1), 53-68.
- St. John, E. P. (1991). What really influences minority attendance? Sequential analyses of the High School and Beyond sophomore cohort. *Research in Higher Education*, *32*, 141-158.
- St. John, E. P., & Noell, J. (1989). The effects of student financial aid on access to higher education: An analysis of progress with special consideration of minority enrollment. *Research in Higher Education*, 30(6), 563-581.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52(6), 613-629.

- Steele, C. M. (2004). *The effect of negative stereotyping on academic performance*. Nancy Cantor Distinguished Lecture on Intellectual Diversity given April 1, 2004, University of Michigan, Ann Arbor.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797-811.
- Stephan, C. W., & Stephan, W. G. (1992). Reducing intercultural anxiety through intercultural contact international. *Journal of Intercultural Relations* 16(1), 89-106.
- Stephan, W. G., & Stephan, C. W. (1989). Antecedents of intergroup anxiety in Asian-American and Hispanic-Americans. *International Journal of Intercultural Relations*, 73, 203-219.
- Stephan, W.G., Boniecki, K.A., Ybarra, O., Bettencourt, A., Ervin, K.S., Jackson, L.A., McNatt, P.S., & Renfro, C.L. (2002). The role of threats in the racial attitudes of Blacks and Whites. *Personality and Social Psychology Bulletin*, 29(9), 1242-1254.
- Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. Journal of the royal statistical society. Series B (Methodological), 111-147.
- Summers, J. J., Svinicki, M. D., Gorin, J. S., & Sullivan, T. A. (2002). Student feelings of connection to the campus and openness to diversity and challenge at a large research university: Evidence or progress. *Innovative Higher Education*, 27(1),53-64.
- Tabachnick, B. G., & Fidell, L. S. (2014). Using multivariate statistics (6th ed.). Harlow, UK: Pearson Education Ltd.
- Tamam, E., & Nadzimah, A. (2012). Influence of ethnic-related diversity experiences on intercultural sensitivity of students at a public university in Malaysia,519–528. https://doi.org/10.1007/s12564-012-9212-2
- Terenzini, P. T., Cabrera, A. F., Colbeck, C. L., Bjorklund, S. A., & Parente, J. M. (2001). Racial and ethnic diversity in the classroom: Does it promote student learning? *Journal of Higher Education*, 72(5), 509-531.
- Terenzini, P. T., Rendon, L. I., Upcraft, M. L., Millar, S. B., Allison, K. W., Gregg, P. L., et al. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, 35(1), 57-73.
- Tierney, W. G. (1992). An anthropological analysis of student participation in college. *Journal of Higher Education*, 62(6), 603-618.
- Tinto, V. (1993). *Leaving College: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.

- Victor B. Saenz, H. N. N. and S. H. (2007). Factors Influencing Positive Interactions Across Race for African American, Asian American, Latino, and White College Students. *Research In*, 48(1), 1–38.
- Weidman, J. (1989). Undergraduate socialization: A conceptual approach. In J. Smart (Ed.), *Higher education: Handbook of theory and research: Vol. 5* (pp. 289-322). New York: Agathon Press.
- Williams, D. A., & Clowney, C. (2007). Strategic planning for diversity and organizational change. *Effective Practices for Academic Leaders*, 2(3), 1-16.
- Williams, D. A., & Wade-Golden, K. (2006). What is a chief diversity office? *Inside HigherEd*. Retrieved April 18, 2006 from http://www.insidehighered.com/workplace/2006/04/18/williams
- Williams, D. A., & Wade-Golden, K. (2007). The chief diversity officer. *College and University Personnel Association Journal*, 58(1), 38-48
- Williams, D. A., Berger, J. B., & McClendon, S. A. (2005). *Toward a model of inclusive excellence and change in postsecondary institutions*. Retrieved from the Association of American Colleges and Universities web site: http://www.aacu.org/inclusive_excellence.
- Zea, M. C, Reisen, C. A., & Beil, C. (1997). Predicting intention to remain in college among ethnic minority and nonminority students. *Journal of Social Psychology*, 137,149-160.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2009). Business research methods (8th ed.). Cambridge, MA: Cengage Learning.