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Predictors of healthcare utilization among Latinos and non-Latino whites : trauma, generation of U. S. residency, perceived health, and protective factors

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Predictors of Healthcare Utilization Among Latinos and Non-Latino Whites: Trauma,
Generation of U.S. Residency, Perceived Health, and Protective Factors

by

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Presented to the Faculty of the
Graduate Department of Clinical Psychology
George Fox University
in partial fulfillment
of the requirements for the degree of
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Newberg, Oregon

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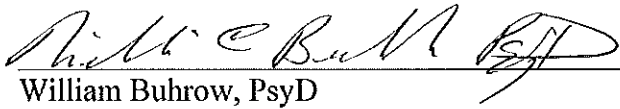
Graduate School of Clinical Psychology

George Fox University


As a dissertation for the PsyD program

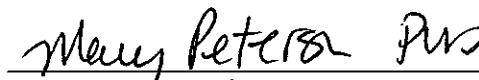
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Abstract

This study contributes to understanding predictors of healthcare utilization among Latinos and non-Latino Whites in a low-income medical facility. Given the ever-increasing costs of healthcare, the patient's need for effective services, and rapid increase in the Latino population, an accurate understanding of healthcare predictors is essential. In the present study 153 participants were included from Oregon, and completed a self-report survey. Predictor variables included: generation of U.S. residency, number of trauma types endorsed, Posttraumatic Stress Disorder (PTSD) symptoms (Primary Care-Posttraumatic Stress Disorder Screen, PC-PTSD), perceived health (Center For Disease Control Health Related Quality of Life – 4, CDC HRQoL-4), social support, educational attainment, self-esteem, and mental health utilization. Correlations were computed to determine which variables to include in the regression analysis for both Latinos and non-Latino Whites. Results revealed perceived health was related healthcare utilization and was a moderate predictor variable, accounting for 9.7% of the variance

for non-Latino Whites. For Latinos, generation of U.S. residency, number of trauma types endorsed, and self-esteem were significant correlates with healthcare utilization and accounted for 14.9% of the variance. Non-Latino Whites tended to utilize services both within and outside Willamette Family Medical Center significantly more than Latinos. Compared to non-Latino Whites, Latinos had a lower level of PTSD symptomology and reported experiencing significantly fewer trauma types. Overall both groups experienced a higher rate of PTSD than was expected (Latinos = 25%, non-Latino Whites = 24%). Implications for healthcare and future research are discussed.

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Chapter 1

Introduction

Healthcare costs in the year 2040 are predicted to consume 34% of the United States spending (U.S.; Hyman, 2009). In response to rising healthcare concerns and costs, President Obama signed the Affordable Care Act in March, 2010. The Act ensures American's have affordable access to quality healthcare. Within the next four years, the Act brings changes and benefits for many groups such as seniors, and those with disabilities and preexisting conditions. However, unauthorized immigrants are not covered by the Act, even those willing to pay for insurance at their own expense (Patient-Protection and Affordable Care Act, 2010; Health Care and Education Reconciliation Act of 2010, 2010).

Contrary to popular concern, unauthorized immigrants seek healthcare services much less than expected (Pew Hispanic Center, 2005). While unauthorized immigrants account for 3.2% of the population, approximately 1.5% of all healthcare costs are utilized by this group (Goldman, Glei, & Chang, 2003).

An estimated 78% of all U.S. immigrants originate from Latin America or Mexico (Pew Hispanic Center, 2005), and Latinos are the fastest growing ethnoracial group in the U.S. (U.S. Census Bureau, 2008). The term "Latino" may represent a variety of individuals from four separate ethnoracial groups consisting of: Mexican, Puerto Rican, Cuban, and other Latino, such as Dominican Republic, Columbian, El Salvador, Ecuador, Guatemala, Honduras, Peru, and

Nicaragua (Alegria et al., 2008). In 2008, Latinos comprised 16% of the population, and are expected to make up over 30% of the total U.S. population in the year 2050 (U.S. Census Bureau, 2008). Despite this, research on Latino's utilization of healthcare remains limited and under-investigated.

As many as 27% of Latinos in the U.S. do not have a regular healthcare provider. This is most commonly related to the lack of perceived need for healthcare, which has implications for illnesses easily detected and treated by routine medical screeners (Pew Hispanic Center & Robert Wood Johnson Foundation, 2008). In addition, unauthorized immigrants may avoid medical services due to fear of deportation (Okie, 2007), leading to increased emergency room utilization (Nandi et al., 2008).

After initial contact with a provider, many Latinos do not continue to utilize services regularly. Reasons for sparse utilization include: language barriers, limited understanding of Latino culture by medical staff, (Flores & Tomany-Korman, 2008), poor service quality (Pew Hispanic Center & Robert Wood Johnson Foundation, 2008), discrimination, and financial limitations (Nandi et al., 2008).

With increases in both the Latino population and healthcare concerns, it is essential to gain a greater understanding of both factors' interaction with each other. Past studies on predictors of healthcare utilization have primarily examined variables such as insurance, gender, and age (Ostertag, Wright, Broadhead, & Altice, 2006; Perry, Williams, Wallerstein, & Waitzkin, 2010). The purpose of this study is to examine other predictors of healthcare utilization among Latinos and non-Latino Whites in a low-income primary care facility in Salem, Oregon. Variables include: generation of U.S. residency, number of trauma types endorsed,

Posttraumatic Stress Disorder (PTSD) symptoms, perceived health, social support, educational attainment, self-esteem, and mental health utilization.

Latinos

Research on Latino health in comparison to non-Latino health is unclear. Some evidence suggests Latinos may face a significantly greater amount of stressors and are more prone to health compromises including: living at or below the poverty line, obesity, chronic or fatal health conditions such as type 2 diabetes or HIV, increased risk for physical injury and mental health problems due to manual labor jobs, and increased exposure to violence (Cabassa, Zayas, & Hansen, 2006; Chen, 2010; Escarce, Morales, & Rumbaut, 2006; Fitzgerald, Damio, Segura-Pérez, & Pérez-Escamilla, 2008; Flores & Tomany-Korman, 2008; Kaltman, Green, Mete, Shara, & Miranda, 2010). Conversely, other studies indicate Latinos are generally much healthier and are less likely than non-Latino Whites to experience earlier mortality rates (Palloni & Arias, 2004), be obese (Kaplan, Hugué, Newsom, & McFarland, 2004), and have mental health problems (Alegria, Mulvaney-Day, Torres, et al., 2007; Alegria et al., 2008; Dey & Lucas, 2006).

Discrepant results are likely to reflect differences in years of U.S. residency. Despite economic disadvantages and increased risk factors, Latino immigrants are initially healthier than non-Latino counterparts. This irony is often referred to as the immigrant paradox (Alegria et al., 2008, Palloni & Arias, 2004). However, the greater length of time spent in the U.S. is likely to result in deteriorating health for Latinos, increasing susceptibility to compromised physical and mental health (Alegria et al. Mulvaney-Day Torres, et al., 2007; Alegria et al., 2008; Dey & Lucas, 2006; Palloni & Arias, 2004; Peña et al., 2008).

Generation of U.S. residency

In 1970 - 2000, the Latino population in the U.S. was primarily made up of immigrants (45%) compared to first generation (28%), and second generation (27%). However, predictions for 2000-2020 population suggest first generation Latinos are expected to make up the majority of the Latino population (45%), followed by third generation (28%), and immigrants (25%; Cacari Stone, Viruell-Guentes, & Acevedo-Garcia, 2007). This suggests the demographics of the Latino population in the U.S. are dramatically changing.

Despite these demographic changes, limited research exists on healthcare utilization across different generations of Latinos (Suro & Passel, 2003). Though several articles suggest the amount of time spent in the U.S. predicts declining health for Latinos, only one article was found explicitly addressing how generations of U.S. residency impacted Latino health, though healthcare utilization was not been explored (Cacari Stone et al., 2007).

In the present study, four different generations of Latinos were incorporated including: immigrants, first, second, and third generation. Latinos were considered immigrants if they were currently residing in the U.S., but were foreign born. First generation Latinos were native born, but had parents were foreign born. Third generation Latinos consisted of those whose self and parents were native born, but whose grandparents were foreign born. Finally, third generation Latinos were those whose self, parents, and grandparents were all born in the U.S.

Trauma

Several studies indicate approximately 67-89% of the population has been exposed to a traumatic event in which trauma was defined in correspondence with the DSM-IV. Those who have experienced at least one traumatic event include: 68-80% of primary care patients including

ethnic minorities (Kartha et al., 2008; McQuaid, Pedrelli, McCahill, & Stein, 2001), 89% of college students (Rosenberg, et al., 2000), and 76% of the general population in Detroit who have experienced at least one traumatic event (Breslau & Kessler, 2001).

Only a fraction of those exposed to traumatic events develop an intense anxiety-based reaction to their stressor known as Posttraumatic Stress Disorder (PTSD). According to the *Diagnostic Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association [APA], 2000), an individual may receive a diagnosis if the event was considered traumatic according to the specifications of Criterion A. Additionally, an individual must meet the appropriate amount of symptoms listed in Criterion B-D, which include reexperiencing, avoidance and numbing, and hyperarousal.

Some evidence exists that suggests Latinos experience traumatic events and symptoms differently than non-Latino Whites. For instance, Latinos may be more likely to experience different intensity levels on criterion B-D of the DSM-IV (APA, 1994) for PTSD (Marshall, 2004; Norris, Perilla, & Murphy, 2001). Additionally, Latinos may be more at risk for trauma exposure (Balsam, Beadnee, & Circo, 2010; Holman, Silver, & Waitzkin, 2000; Hussey, Chang, & Kotch, 2006; Pole et al., 2001; Ullman & Filipas, 2005), and develop more extreme symptoms of PTSD than non-Latino Whites (Holman, Silver, & Waitzkin, 2000; Pole et al., 2001).

Traumatic exposure appears to be highly correlated with healthcare utilization (Gillock, Zayfert, Hegel, & Ferguson, 2005; Hidalgo & Davidson, 2000; Rosenberg et al., 2000; Schnurr, Paris, & Spiro, 2000; Stein, McQuaid, Pedrelli, Lenox, & McCahill, 2000), resulting in substantial cost for the healthcare system (Schnurr et al., 2000). However, other articles suggest trauma exposure and healthcare utilization are unrelated (Kartha, et al., 2008). Discrepancy in

research may be related to the finding that as little as half of those with PTSD receive a diagnosis from their primary care provider suggesting it goes undetected in some samples (Magruder et al., 2005).

Finally, traumatic exposure is comorbid with multiple physiological and psychological disorders such as Major Depressive Disorder and somatization (Baker, Norris, Jones, & Murphy, 2009; Bloom, Curry, & Durham, 2007) and the presence of a psychiatric disorder increases healthcare utilization (Holman et al., 2000). Physiologically, PTSD is also associated with multiple symptoms, which include but are not limited to: bodily pains, migraines, nervous system and autoimmune diseases, complications with musculoskeletal, dermatologic, cardiovascular, and gastrointestinal systems (Baker et al., 2009; Farley & Patsalides, 2001; Goodwin & Davidson, 2005; Goodwin, Hoven, Murison, & Hotopf, 2003; Schnurr et al., 2000; Weisberg et al., 2002). Comorbidities exist even after controlling for lifestyle choices that negatively impact health such as substance abuse, smoking, and lack of exercise (Beckham et al., 1998; Weisberg et al., 2002).

Perceived Health

Self-report measures are a widely accepted as valid and reliable measures for assessing health, especially when predicting illness states, mortality, and negative health (Benyamini, Idler, Leventhal, & Leventhal, 2000; Goldman et al., 2003). Changes in reported physical health symptoms are associated with corresponding changes in self-rated health. The knowledge patients have about their own health has been found to be a stronger predictor than objective measures of physician ratings (Winter, Lawton, Langston, Ruckdeschel, & Sando, 2007).

In comparison with non-Latino Whites and Black Americans, Latinos rated their health as worse, even when variables such as socioeconomic status, marital status, and poor health were controlled for. Additionally, Latinos experienced a faster deterioration of health than other ethnorracial groups (Liang et al., 2010). Among Latinos, the relationship between lower perceived health and risk of mortality increases with increased levels of acculturation (Finch, Hummer, Reindl, & Vega, 2002).

Protective Factors

Some protective factors may buffer the effects of poor health, and also increase recovery speed from experiencing stress (Mertin & Mohr, 2001). This study also explored several protective factors including: social support, educational attainment, self-esteem, and mental health utilization.

Social support. Social support appears to be a protective factor for Latinos and non-Latino Whites experiencing a moderate amount of stress (Batbum & Baumann, 2007; Wilks & Croom, 2008). Several studies exist on the relationship between social support and health, though at times they provide conflicting evidence. For instance, in one study, a higher level of social support was associated with access to a regular medical provider (Nandi et al., 2008). However, another study suggests social support and healthcare utilization are unrelated (Sellars, Garza, Fryer, & Thomas, 2010).

One possible explanation for conflicting findings is that the social networks of which an individual is a member may heavily influence utilization. Such networks impact utilization by providing information and creating norms. If an individual's social support system provides misinformation and possesses a general mistrust of healthcare services, that individual may be

less likely to utilize medical services when it may otherwise be appropriate to do so (Deri, 2005; Sellars et al., 2010).

Additional findings on social support suggest: changes in perceived support is related to shifts in self-reported quality of life among Latinos (Sammarco & Konecny, 2005), social support is inversely related to barriers to accessing healthcare (Perry et al., 2008), and social support correlates with health status (Wright, 2006). Finally, perceived social support is associated with greater physical and mental health for non-Latino minorities and non-Latino Whites (Wenzel, Tucker, Elliot, Marshall, & Williamson, 2004).

The majority of past research indicates social support and healthcare are positively related, and support networks may heavily influence utilization. For the purpose of the present study, social support is defined as the perception that an individual has at least one person who they can talk to or who listens to them, and is expected to be a predictor of healthcare utilization.

Educational attainment. Research on the relationship between educational attainment and healthcare utilization is mixed. Some studies suggest education is not a significant predictor of utilization (Ostertag et al., 2006; Sellars et al., 2010;). Conversely, in a primary care sample, those who had at least a high school education were more likely to utilize services from a specialist when appropriate, and tended to have higher healthcare for themselves, even when age, income, and health insurance were controlled for (Alguwaihes & Shah, 2009).

There appears to be ethnoracial differences in educational attainment between Latinos and non-Latino Whites. When compared to non-Latino Whites and minorities, Latino's have the least amount of education (Ostertag et al., 2006; Vogel & Marshal, 2001;). Additionally, Latinos with greater educational attainment appear to utilize emergency room services more frequently

than Latinos with lower education (Nandi et al., 2008). Finally, higher educational attainment may predict higher physical functioning (Holman, Silver, & Waitzkin, 2000).

The current study defined educational attainment as earning at least a high school diploma or G.E.D. Though past research is mixed, it is expected in the present study that educational attainment will be a positive predictor of healthcare utilization.

Self-Esteem. Some studies report self-esteem and healthcare utilization as positively related (Bazin, Parizot, & Chauvin, 2005; Ostertag et al., 2006;), while another study suggested low self-esteem is consistent with high use of medical services (Bloom et al., 2007). Overall, self-esteem appears to be a resilience factor protecting against depressive symptoms, negative affect, stress, symptoms of illness (Steinhardt & Dolbier, 2008), mental disorders, and externalizing behaviors such as violence, or substance abuse (Mann, Hosman, Schaalma, & de Vries, 2004).

In sum, findings on self-esteem and healthcare utilization vary. It is predicted self-esteem, defined as feeling good about oneself and feeling one has good self-esteem, will be a predictor of healthcare utilization in the current study.

Mental health utilization. Mental health issues are related to higher healthcare utilization (Bloom et al., 2007). Disorders typically treated by mental health services such as depression, anxiety, or somatization, account for $\geq 50\%$ of healthcare costs (Grabe, Baumeister, Ulrich, Freyberger, & Volzke, 2009). A metaanalysis revealed that though psychotherapy did not appear to decrease physical illness, it was significant in the reduction of pain and cost of medical treatment (Luborsky et al., 2004).

Latinos may be less likely than non-Latino white counterparts to utilize mental health services and are less satisfied with mental health results overall. Barriers to seeking treatment included language and acculturation levels (Alegría, Mulvaney-Day, Woo et al, 2007; Cabassa, Zayas, & Hansen, 2006). In the present study, if any individual has utilized mental health services in the past or currently, it was predicted they would also tend to utilize healthcare services more frequently.

Hypotheses

This study explores patterns of healthcare utilization services among Latinos and non-Latino Whites in a low-income primary care facility. An examination of past research suggests Latinos and non-Latino Whites may have similar healthcare predictors, though each ethnoracial group should be considered independently.

It is hypothesized the greatest predictors of health care utilization for both Latinos and non-Latino Whites will be: a greater number of PTSD symptoms, greater number of trauma types endorsed, lower perceived health, later generations of U.S. residency (for Latinos only), higher educational attainment, social support, reported low self-esteem, and past or present mental health utilization.

Chapter 2

Methods

Participants

Participants consisted of patients of Willamette Family Medical Center (WFMC) located in Salem, Oregon. The clinic primarily serves those from a lower socioeconomic status who may not be able to afford health insurance. Subjects may or may not have had a medical appointment upon completing the survey. Exclusionary criteria included being outside the age range of 18-85, and having been a patient of the clinic for less than two years.

Instruments

A self-report demographic survey was administered, asking participants to identify their ethnorracial background, generation of U.S. residency, number of endorsed trauma types, PTSD symptoms, a variety of protective factors, and utilization of healthcare services outside WFMC within the past two years (Appendix C). In the present study the definition of trauma type was in concordance with the DSM-IV-TR, and a list of trauma types were included for participants to endorse those they have experienced.

Also included in the survey was a 4-item self-report questionnaire developed by the Centers of Disease Control and Prevention (CDC) called the Health Related Quality of Life – 4 (CDC HRQoL-4; Appendix C, Centers for Disease Control and Prevention, 2010). Though typically this measure is used to track changes in health over time, it has also been shown to be a

good measure of perceived health (Moriarty, Zack, & Kobau, 2003). For the purpose of this study, only the first question was used to determine perceived health, which asks participants to rate their overall health on a 5-point Likert scale (1 = *excellent*, 5 = *poor*).

The CDC HRQoL-4 has been shown to have adequate reliability and validity. When compared to other valid measures of self-reported health the CDC HRQoL-4, correlates strongly with the Short Form (36) Health Survey ($r = -.748, p < .001$) but weakly with the General Health Questionnaire-12 ($r = -.282, p < .001$). Additionally, construct validity has been reported as good, and the CDC HRQoL-4 is able to discriminate between subjects with and without chronic conditions. The CDC HRQoL-4 has good internal consistency with a ($\alpha = .77$; Toet, Raat, & van Ameijden, 2006).

To measure the prevalence of PTSD symptoms, the Primary Care Posttraumatic Stress Disorder (PC-PTSD; Appendix C; Prins et al., 2003) was used. This measure is comprised of four questions reflective of criteria C-D from the DSM-IV. These questions are thought to be reflective of symptoms unique to PTSD and not to other expressions of psychological distress. Participants were asked to endorse symptoms experienced in the past month that are related to a traumatic event. The PC-PTSD is designed to be an effective measure of PTSD when time and resources are limited, and is mandated for use in primary care VA settings (Ouimette, Wade, Prins, & Schohn, 2008).

The PC-PTSD compared well with the Clinician Administered Scale for PTSD, often considered the gold standard for measuring PTSD ($r = .83, p < .001$). When the suggested cutoff score of three symptoms is applied, the PC-PTSD has a sensitivity rate of .78 and a specificity rate of .87. Test re-test for the PC-PTSD is good ($.83, p < .001$). Additionally, the PC-PTSD only

requires an 8th grade reading level and was normed on a sample of which 43% of participants were unemployed (Prins et al., 2003).

Procedure

After patients checked-in with a receptionist, the examiner approached patients and invited their voluntary participation in the survey, taking approximately 5-7 minutes to complete. An informed consent was attached to the survey (Appendix A). Surveys were completed in the waiting or exam room, and were administered in either English or Spanish, depending on participant's language preference. Surveys were returned to the examiner prior to leaving the clinic. Participants were informed they were able to discontinue testing at any point.

Patient's medical charts were accessed using Electronic Medical Records (EMR) in order to determine the frequency of healthcare utilization in the past two years. EMR was also used to insure each patient was over the age of 18 and had been a patient of the clinic for at least two years. If a participant visited the clinic more than once within the same day, only one visit was counted. Services utilized for vaccinations, or pregnancy was not counted as service utilization.

Statistical Analysis

Separate logistical regressions were used for Latino and non-Latino Whites to determine what variables are the strongest predictors of healthcare utilization.

Chapter 3

Results

One hundred eighty participants were given the survey, but due to survey incompleteness or self-reporting an ethnoracial background other than Latino ($n = 76$) or non-Latino white ($n = 77$), only 153 participants were included. A total of 133 participants were female, and 20 were male. The average number of annual healthcare utilization visits to WFMC was 6.80 ($sd = 6.7$) and the average age of participants was 36.88 ($sd = 6.7$). A detailed report of demographics and frequencies for non-Latino Whites and Latinos can be found on Table 1 and Table 2.

Table 1

Sample Descriptive Statistics 1

Variable	non-Latino White		Latino	
	<i>n</i>	<i>SD</i>	<i>n</i>	<i>SD</i>
WFMC medical visits	8.35	7.43	5.22	5.50
Other medical visits	5.32	6.75	3.26	5.71
Age	37.97	16.86	35.76	13.98
Perceived health (HRQoL)	2.92	1.02	2.91	1.11

Table 2

Sample Descriptive Statistics 2

Variable	non-Latino white		Latino		t-test _{diff} , Cohen's <i>d</i>
	<i>n</i>	%	<i>n</i>	%	
Gender					
Male	8	10.4	12	15.8	
Female	69	89.6	64	84.2	
Trauma type					
Accident/injury	27	35.1	14	18.4	
Medical illness	18	23.4	7	9.2	
Natural disaster	3	3.9	2	2.6	
War/terrorism	1	1.3	6	7.9	
Childhood neglect	27	35.1	14	18.4	
Sexual trauma	32	41.6	13	17.1	
Witnessing sexual trauma	2	2.6	2	2.6	
Physical abuse	33	42.9	17	22.4	
Witnessing physical abuse	25	32.5	3	50.0	
<i>No of trauma types endorsed</i>					3.838***, .617
0	19	24.7	39	51.3	
1	11	14.3	14	18.4	
2	15	19.5	11	14.5	
3	10	13.0	3	3.9	
4	12	15.6	5	6.6	
5+	10	13.0	4	5.2	
<i>No of PTSD symptoms (PC-PTSD)</i>					1.803*, .291
0	31	40.3	39	51.3	
1	8	10.4	10	13.2	
2	14	18.2	8	10.5	
3	8	10.4	13	17.1	
4	16	20.8	6	7.9	
Protective factors					
Self-esteem	45	58.4	54	71.1	2.377**, .380
High school diploma/GED	58	75.3	39	51.3	
Junior college/college degree ¹⁶	20.8	11.0	14.5		
Social support	62	80.5	53	69.7	
Mental health utilization	36	46.8	17	22.4	
None	0	0	3	3.9	
Generation of U.S. residency					
Immigrant	1	1.3	42	55.3	
1 st generation	16	20.8	18	23.7	
2 nd generation	3	3.9	8	10.5	
3 rd generation	57	74.0	8	10.5	

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

A series of Pearson correlations were run separately for Latinos and non-Latino Whites to determine what variables correlated with healthcare utilization. For Latinos generation of U.S. residency (.233, $p < .05$), self-esteem (-.245, $p < .05$), and number of trauma types endorsed (.299, $p < .01$) were significant correlates of healthcare utilization (Table 3). PTSD symptoms, social support, educational attainment, mental health utilization, and self-esteem were not included in the regression analysis for Latinos as they were not significant correlates. Perceived health (.309, $p < .01$) was the only significant correlate for non-Latino Whites.

A multiple linear regression was calculated to predict healthcare utilization among Latinos based on generation of U.S. residency, self-esteem, and number of trauma types endorsed (Table 4). A significant regression equation was found ($F(3,72) = 4.195, p < .01$) with an R^2 of .149. Effect size was moderate and predictor variables accounted for 14.9% of variance in healthcare utilization among Latinos.

A simple linear regression was calculated predicting non-Latino white's healthcare utilization based on the perceived health (Table 5). A significant regression equation was found ($F(1,75) = 8.072, p < .01$), with an R^2 of .097. Effect size was moderate and healthcare utilization accounted for 9.7% of the variance. For every point increase of perceived health (1= *excellent*, 5= *poor*), the average number of medical visits increased by 1.13 per year.

Several independent-samples t tests were used to determine if significant differences among Latinos and non-Latino Whites exist. It appears non-Latino Whites tended to utilize additional medical visits at other facilities outside WFMC more frequently than Latinos ($t(151) = 2.03, p < .05; d = .33$). On average non-Latino Whites visited other facilities an average of 5.32 times per year ($sd = 6.75$), compared to Latinos who used additional medical services 3.26 times

a year ($sd = 5.71$). Independent-samples t tests also revealed Non-Latino Whites endorsed experiencing a significantly higher amount of trauma types ($t(151) = 3.838, p < .001; d = .617$), number of PTSD symptoms ($t(151) = 1.803, p < .05; d = .291$), and total number of protective factors ($t(151) = 2.377, p < .01; d = .380$) than Latinos (Table 2).

Table 3

Summary of Intercorrelations for Healthcare Utilization, PTSD Symptoms, Number of Trauma Types Endorsed, Perceived Health, Generations of U.S. Residency, Educational Attainment, Social Support, Self-Esteem, and Past or Present Mental Health Utilization by Ethnoracial Group

Measure	1	2	3	4	5	6	7	8	9
Healthcare utilization	---	.203	.190	.312**	-.048	-.054	-.012	.094	.171
PTSD symptoms	.168	---	.341**	.256*	.050	-.065	-.038	-.225*	.264*
Trauma types	.293*	.412**	---	.257*	-.043	-.143	-.136	-.051	.239*
Perceived health	.202	-.227*	.074	---	-.029	-.014	-.167	-.428**	-.082
Generation	.234*	.028	.254*	.039	---	-.118	.213	-.055	.084
Education	.064	.174	.159	-.177	.423**	---	.023	.006	-.067
Social support	.165	-.134	-.026	.152	.109	-.019	---	.384**	-.262*
Self-esteem	.240*	-.149	-.169	-.053	-.063	.133	-.026	---	-.055
Mental health	.146	-.361**	.355**	-.242*	-.469**	.270*	-.078	-.075	---

Note. Intercorrelations for non-Latino Whites ($n = 77$) are presented above the diagonal and intercorrelations for Latinos ($n = 76$) are presented below the diagonal. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4

Multiple Regression Testing Effects of Generation of U.S. Residency, Self-Esteem, and Number of Trauma Types Endorsed on Healthcare Utilization for Latinos (N = 76)

Variable	Healthcare utilization ($R^2 = .149$)				
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Generation of U.S. Residency	.896	.607	.166	1.476	.144
Self-esteem	-2.312	1.328	-.192	-1.740	.086
Trauma types	.731	.381	.218	1.918	.059

Table 5

Simple Regression Testing the Effect of Perceived Health on Healthcare Utilization for Non-Latino Whites (N = 77)

Variable	Healthcare utilization ($R^2 = .097$)				
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Perceived Health	2.265	.797	.312	2.841	.006

Chapter 4

Discussion

The present study sought to explore predictors of healthcare utilization among Latinos and non-Latino Whites. Non-Latino Whites' sole predictor of healthcare utilization was perceived health. For Latinos, healthcare utilization appeared to be predicted by later generations of U.S. residency, low self-esteem, and greater number of trauma types endorsed.

Contrary to other research, Latinos in this study did not report a higher level of traumatic exposure than non-Latino Whites (Balsam et al., 2010; Holman et al., 2000; Hussey et al., 2006; Pole et al., 2001; Ullman & Filipas, 2005). In the present study most Latinos endorsed never having experienced a trauma type listed (51.3%), followed by one (18.4%), two (15.5%), or three or more trauma types (14.8%). The most common types of trauma experienced by Latinos was witnessing physical abuse (50%), experiencing physical abuse (22.4%), childhood neglect (18.4%), and a life threatening accident or injury (18.4%). The most common trauma type exposures among non-Latino Whites included physical abuse (42.9%), sexual trauma (41.6%), witnessing physical abuse (32.5%), exposure to a serious accident or injury (35.1%), and childhood neglect (35.1%).

Though Latinos reported fewer trauma type experiences than non-Latino Whites, they did endorse experiencing a higher level of PTSD than was expected. When the suggested cutoff score of 3 or more was applied on the PC-PTSD, 25% of all Latinos may currently be suffering

from PTSD, even though over half (51.3%) endorsed never having experienced a trauma type listed on the survey. In contrast, 31.2% of non-Latino Whites may meet criteria for PTSD, though 24.7% of the non-Latino white sample has never experienced a trauma type. Both of these PTSD rates exceed other primary care samples, which state PTSD occurs in 9-11.8% of patients (Gillock et al., 2005; Stein et al., 2000) and up to 19% in Latinos (Blume, Resor, Villanueva, & Braddy, 2009).

Exposure to trauma has been found to be associated with greater physical and mental health problems (Baker et al., 2009; Goodwin et al., 2003) and is thought to increase health utilization (Holman et al., 2000). In addition to having a greater level of PTSD than in other primary care samples, the current study found participants also utilized healthcare services more often. One study found the average number of visits minorities, including Latinos, made to a primary care clinic was 3.61 a year (Deri, 2005). In the present study, Latinos accessed health services 5.22 times a year on average ($sd = 5.5$), and non-Latino Whites utilized healthcare an average of 8.35 times ($sd = 7.43$).

Results suggest Latinos may be more sensitive to endorsing or experiencing PTSD symptoms. Some research suggests Latinos may be likely to develop more extreme symptoms of PTSD (Pole et al., 2001). Other articles state Latinos may be more likely to experience different intensity levels on criterion B-D of the DSM-IV for PTSD (Marshall, 2004; Norris et al., 2001). Further, certain trauma types, such as physical abuse, are more likely to result in PTSD for Latinos, suggesting some ethnic groups may have different pathways of vulnerability (Balsam et al., 2010). Results of the current study suggest Latinos also reported greater exposure to physical abuse than non-Latino Whites. Another explanation for this finding lies in the potentially

restrictive nature of the definition of trauma according the DSM-IV-TR and as reflected in the survey. Such a definition does not account for other stressors Latinos may face including arrest and deportation of family members, and discrimination. The impact of these stressors can have detrimental effects on a Latino community and family both financially and emotionally (Krysiak, Gerdes, & Segal, 2011).

Though in this study non-Latino Whites tended to have significant higher rates of PTSD symptoms, and number of trauma type endorsement, they also had a significantly greater amount of protective factors than Latinos. Though it can't be determined if protective factors were obtained before or after exposure to trauma types, it may be that protective factors do not prevent traumatic exposure or symptomatology in non-Latino Whites.

Latinos tended to utilize healthcare services significantly less both at WFMC and at other medical facilities than non-Latino Whites. Consistent with another study, Latinos did not rate their health significantly worse than non-Latino Whites (Liang et al., 2010). Reasons for this finding include a variety of barriers to accessing healthcare services for Latinos such as limited understanding of Latino culture by medical staff, (Flores & Tomany-Korman, 2008), poor service quality (Pew Hispanic Center & Robert Wood Johnson Foundation, 2008), discrimination, and financial limitations (Nandi et al., 2008). However, most Latino medical assistants at WFMC are also from a Latino background, and nearly all medical providers are bilingual. Further, WFMC provides medical care for those who are under or uninsured on a sliding scale fee. The finding that Latinos tended to utilize healthcare services less frequently may support the immigrant paradox, as nearly 80% of the Latino sample were either immigrants or first generation. This supports past findings that suggests Latino health may deteriorate over

time (Alegria, Mulvaney-Day, Woo et al, 2007; Alegria et al., 2008; Dey & Lucas, 2006; Palloni & Arias, 2004; Peña et al., 2008).

Limitations

Some limitations were found in the design and nature of the survey. Firstly, certain questions on the survey were in a yes/no format, which limited range variability. Secondly, a large majority of the data gathered was self-report. Thirdly, reading literacy and comprehension may have been overestimated for this sample. The administrator noted some participants had difficulty understanding or reading the survey, which may have contributed to misreporting or incomplete surveys. Fourthly, findings of the survey may be applicable to other Latinos or non-Latino Whites in a low-income primary care sample, but not the general population.

Certain groups were not equally represented in this study including males and some generations of U.S. residency for both Latinos. 87% of the sample was female, and women tend to utilize healthcare services more than males (Ostertag et al.; Sellars et al., 2010; Wright, 2006). Imbalances in generation of U.S. residency existed among Latinos, as nearly 80% of the sample was made up of immigrants or first generation. Therefore, the findings of this study were more reflective of earlier generations of Latinos than later and may not be an adequate representation of Latinos across all generations.

Suggestions for Future Research

The current study examined various predictors of healthcare utilization among a primary care sample of Latinos and non-Latino Whites. Further research is needed to examine various generational components of U.S. residency that may influence health, healthcare utilization, and response to trauma.

Though this study did not explicitly examine unauthorized immigrants, further research in relation to healthcare access is needed in order to best care for health needs. This is especially relevant in the context of the Affordable Care Act, which will prevent unauthorized immigrants from purchasing health insurance.

PTSD rates among the Latino sample in the current study appeared to be higher than expected. Past studies have shown that trauma may manifest itself physiologically in a variety of ways (Baker et al., 2009; Goodwin et al. 2003). Other studies have suggested Latinos may be more vulnerable to the development of PTSD among certain kinds of trauma, such as physical abuse (Balsam et al., 2010). No known studies have examined if Latinos may also be more vulnerable to certain kinds of physical manifestations of trauma. A greater understanding of this may help bridge decrease the seemingly high amount of undiagnosed PTSD in primary care samples (Magruder et al., 2005), leading to better detection and treatment of trauma, potentially resulting in lower healthcare costs.

Finally, though self-esteem appeared to be a negative predictor of healthcare utilization among Latinos, there appears to be limited research explaining this as a protective factor. More research is needed to understand the implications of self-esteem as a protective factor among a Latino sample.

Conclusion

Concerns with healthcare costs and the Latino population have independently increased in the United States. The present study detected several differences across domains between ethnoracial groups, further illustrating the importance of cultural competence and awareness when working with diverse populations in the healthcare field. Gaining a greater cultural

understanding may help decrease the gap between the underutilization of healthcare services and worse self-reported health. Understanding predictors and patterns of healthcare utilization among a Latino population is essential to providing adequate healthcare services.

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Appendix A
Informed Consent (English)

wfmc

Please take a few minutes to answer the following 2 pages of questions. The point of this study is to help the clinic understand more about the average patient to provide the best services possible to everyone. Your answers will not go in your medical chart, and will not be looked at by anyone (including your provider). Only the researcher (Kristin Conlon) will see responses. To help protect your privacy, your name will not be attached to these surveys. This study is voluntary and you may choose to stop at any point.

Please continue the survey if:

- You have been a patient of the clinic for about 2 years
- You are over the age of 18

Appendix B

Informed Consent (Spanish)

wfmc

Por favor tome unos momentos para contestar las siguientes dos paginas de preguntas. La meta de este estudio es para ayudar la clínica entender mas acerca las necesidades de sus pacientes. Sus respuestas no irán a su archivo medico y no serian vistas por nadie (incluyendo su doctor). Solamente el creador (Kristin Conlon) mirará sus respuestas. Para su privacidad, su nombre no será puesto junto con esta encuesta. Este estudio es voluntario y puede optar por no hacerlo en cualquier momento.

Por favor, siga con el cuestionario solamente si:

- Ud. ha sido un/una paciente de la clínica de Willamette Family Medical Center por 2 años más o menos
- Ud. tiene más de 18 años

Appendix C
Survey (English)

wfmc

1. Which of the following best describes your race?

- | | |
|---|--|
| <input type="checkbox"/> African-American | <input type="checkbox"/> Multiracial (i.e. Latino and Caucasian) |
| <input type="checkbox"/> Arab or Middle Eastern | <input type="checkbox"/> Native American |
| <input type="checkbox"/> Asian-American | <input type="checkbox"/> Pacific Islander |
| <input type="checkbox"/> Caucasian | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Latino | |
-

2. Please check all that apply:

- You were born in the United States
 Your parents were born in the United States
 Your grandparents were born in the United States
 None of the above

3. Would you say your health is:

- Excellent Very good Good Fair Poor

4. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

My guess is ____ days

5. Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

My guess is ____ days

6. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

My guess is ____ days

7. Please check all that apply:

- Overall I feel good about myself and think I have good self-esteem
 I have my high school diploma or G.E.D
 I have a degree from a college, university, or junior college
 I have at least one person I can talk to who listens or understands me
 I am currently in counseling or have been in the past
 None

8. How many times in the past 2 years have you been to another medical visit (this includes visits to the emergency room, gastroenterologist, dermatologist, neurologist, cardiologist, etc)?

Approximately ____ visits

-
9. Have you ever had an experience so frightening, horrible, or upsetting, that, in the past month you:

- a. Had a nightmares about it or thought about it when you did not want to
 - Yes No
- b. Tried hard not the think about it or went out of your way to avoid situations that reminded you of it?
 - Yes No
- c. Were constantly on guard, watchful, or easily startled?
 - Yes No
- d. Felt numb or detached from others, activities, or your surroundings?
 - Yes No

-
10. In your life, check all of the following traumas you have experienced:

- Serious accident or injury
- Diagnosis of a life threatening medical illness
- Victim of a severe natural disaster
- Direct exposure to war or acts of terrorism
- Childhood neglect by parents/caregivers (not having needs met including food, clothing, shelter, love/emotional support, safety, etc)
- Sexual trauma or rape
 - Witnessing a sexual trauma or rape
- Physical abuse or assault (physical event against you that either yourself or others would believe is wrong. The physical event left a mark on your body for a short or long amount of time)
 - Witnessing physical abuse or assault
- None

-
11. If you checked any of the boxes above in question 10 (besides “none”) please answer the following:

Of the one traumatic experience that you checked above that has had the greatest impact on your life:

- a. How old were you when this trauma first happened? About or exactly _____ years old
- b. How old were you when the trauma last happened? About or exactly _____ years old
- c. Is the trauma still happening (for example, continued physical abuse?)
 - Yes No

d. How many times have you experienced this trauma in your life?

1 2 3 4 5+

e. After it first happened did you feel intense fear, helplessness, or horror?

Yes No

Appendix D
Survey (Spanish)

wfmc

1. ¿Cuál describe su raza lo mejor?

- | | |
|---|---|
| <input type="checkbox"/> Afroamericano | <input type="checkbox"/> Multirracial (Por ejemplo, Latino(a) y Caucásico(a)) |
| <input type="checkbox"/> Árabe o de oriente medio | <input type="checkbox"/> Indio (a) americano (a) |
| <input type="checkbox"/> Americano (a) de origen asiático | <input type="checkbox"/> Islandés pacífico |
| <input type="checkbox"/> Blanco (a) | <input type="checkbox"/> Otro (a): |
| <input type="checkbox"/> Latino (a) | |

2. Por favor marque las casillas que corresponden a su persona:

- Estuve nacido en los Estados Unidos
- Sus padres estuvieron nacido en los Estados Unidos
- Sus abuelos estuvieron nacido en los Estados Unidos
- Ninguno de los arriba

3. Usted diría que, en general, su salud es:

- Excelente Muy buena Buena Regular Mala

4. Ahora piense acerca de su salud física, la cual incluye enfermedades físicas y accidentes: ¿Durante cuántos de los pasados treinta días no gozó de buena salud física?

 Mi suposición es ____ días

5. Ahora piense acerca de su salud mental, la cual incluye tensión, depresión y problemas emocionales: ¿Durante cuántos de los pasados treinta días no gozó de buena salud mental?

 Mi suposición es ____ días

6. ¿Durante cuántos de los pasados treinta días, el mal estado de salud mental o física le impidieron realizar sus actividades, tales como cuidado personal, trabajo o recreación?

 Mi suposición es ____ días

7. Por favor marque las casillas que corresponden a su persona:

- Sobretudo me siento bien conmigo mismo(a) y creo que me estimo a mi mismo(a)
- Tengo mi diploma de preparatoria o GED
- Tengo un diploma de universidad o colegio
- Tengo por lo menos una persona con la que puedo hablar que me escucha o me comprende
- Por ahora estoy en consejería o he estado en el pasado
- Ninguno

8. ¿Cuántas visitas al doctor a tenido en los 2 últimos años (esto incluye sala de emergencias, gastroenterólogo, dermatólogo, neurólogo, cardiólogo, etc.)?

Aproximadamente _____ visitas.

9. alguna vez ha tenido experiencias espeluznantes, horripilantes, o frustrantes que, en el mes pasado:

- a. Tuvo pesadillas o pensó en ello cuando no quiera
 Sí No
- b. ¿Trató de no pensar acerca de ello o evadió situaciones que le recordaran al respecto?
 Sí No
- c. ¿Estuvo atento, asustado o espantado?
 Sí No
- d. ¿Se sintió triste, separado de otro, actividades o alrededores?
 Sí No

10. En su vida, marque las siguientes traumas que ha tenido:

- Accidente serio o lastimaduras
- Diagnósticos de enfermedades que ponen en peligro su vida
- Víctima de un desastre natural sereno
- Expuesto directamente a guerra o acto de terrorismo
- Negligencia de padres cuando era niño (no gozar de necesidades como alimento, vestuario, albergue, o apoyo emocional, etc.)
- Trauma sexual o violación
 Fue testigo de un abuso sexual
- Abuso físico (abuso físico contra usted que piensa que era malo contra usted o otros).
 Fue testigo de abuso físico
- Ninguno

11

- . Si usted marcó algunas de las casillas en pregunta 10 (aparte de “ninguno”) por favor conteste lo siguiente:

De cualquier experiencia traumatizante que haya marcado, cual tuvo un impacto mayor en su vida:

- a. ¿Que edad tenía cuando esto pasó? Como o exactamente _____ años
- b. ¿Que edad tenía la última vez que lo pasó? Como o exactamente _____ años
- c. ¿Todavía pasa por eso experiencia? (por ejemplo, ¿abuso físico continuo?)
- d. ¿Cuántas veces pasó por éste trauma en su vida:
 1 2 3 4 5+
- e. ¿Después de la primera vez que pasó, se sintió con miedo, sin ayuda o horror?
 Sí No

Appendix E
Curriculum Vita

KRISTIN N. CONLON

3725 Oak Grove Street Newberg, Oregon 97132 / Cell 971-237-1267 / krconlon@georgefox.edu

EDUCATION

- George Fox University** *Newberg, Oregon*
 Psy.D. Clinical Psychology [Expected April, 2012]
- George Fox University** *Newberg, Oregon*
 M.A. Clinical Psychology [2009]
- George Fox University** *Newberg, Oregon*
 B.S. Psychology [2007] – Cum Laude

SUPERVISED CLINICAL EXPERIENCE

- Supplemental Practicum** – Newberg, Oregon *October, 2010 - Present*
 Meet twice weekly with a client practicing from a psychodynamic perspective. Receive weekly supervision and review audiotaped sessions.
 Supervisor: Joel Gregor, Psy.D.
- Behavioral Health Clinic** – Newberg, Oregon *August, 2010 – Present*
 Pre-Internship
 Serving as the fourth-year management student of a developing community mental health clinic. Provide short and long-term therapy with clients who represent a variety of different cultural, ethnic, and intellectual backgrounds. Responsible for leading weekly peer consultation meetings and reviewing peer chart notes, treatment plans, and designing and implementing more efficient and effective clinic policies and operations. Other duties include: conducting comprehensive assessment batteries, leading group therapies, and reviewing video recordings of sessions. Receive weekly individual and group supervision, and an additional training hour.
 Supervisor: Joel Gregor, Psy.D.
- Willamette Family Medical Center** – Salem, Oregon *July, 2009 – July, 2010*
 Practicum II
 Responsible for developing the first mental health program and training other mental health providers at an existing medical clinic. Provided short or long-term therapy, and crisis intervention to individuals, couples, and families. Clientele were diverse in age (4-85+), ethnic background (~50% minority), language (experience working with translator for non-English speakers), and presenting problem. Facilitated weekly program development meetings with the medical director and other staff, and implemented outcome measures. Other duties included conducting comprehensive assessment batteries, frequently consulting with a culturally diverse

multidisciplinary team, and grant application. Also reviewed audiotaped sessions weekly and dictated chart notes. Received weekly group and individual supervision.

Supervisors: Charity Benham, Psy.D. and Lane Dewan, Psy.D.

Clark County Juvenile Court – Vancouver, Washington

August, 2008 – July, 2009

Practicum I

Provided short term and long-term mental health services to a diverse population of male and female youth, ages 12-25 with a wide range of severe pathology. Responsible for conducting full battery comprehensive assessments and report writing upon request. Designed and implemented my own weekly group therapy curriculum focused on emotion regulation and healthy relationships. Frequently sought out and consulted with a multidisciplinary team to best meet the needs of youth. Other responsibilities included: assessing for suicidality in high-risk clients, coordinating outpatient services, and presenting audio case and conceptualization in weekly didactics meetings. Received weekly group and individual supervision.

Supervisors: Shirley Shen, Psy.D. and Christine Krause, Psy.D.

George Fox University - Newberg, Oregon

September, 2007 – April, 2008

Pre-Practicum I & II

Provided simulated psychotherapy sessions to male and female undergraduate and graduate students. Responsibilities included intake interviews, report writing, case presentations, and creating and implementing treatment plans. All sessions were video taped and reviewed by supervisor. Received weekly individual and group supervision, and consulted with clinical team.

Supervisors: Mary Peterson, Ph.D., and Jory Smith, M.S.

Hillcrest Youth Correctional Facility – Salem, Oregon

January – April, 2006

Undergraduate Intern

Observed clinical intakes, crisis interventions, and consultation meetings for youth ages 12-25. Participated in weekly case reviews and Anger Replacement Therapy groups for a diverse population of male and female incarcerated youth. Frequently consulted with treatment manager and director of mental health.

Supervisors: Mark McKinney, LCSW, and Kristina Kays, Psy.D.

Love, INC – Newberg, Oregon

January – April, 2006

Undergraduate Intern

Scheduled and conducted intakes and follow up sessions with low SES families and adults, seeking crisis intervention and connections to available resources. Designed and implemented changes to program to make it more effective and efficient. Received weekly supervision and consultation.

Supervisors: Polly Siler, B.A., and Kristina Kays, Psy.D.

PEER REVIEWED SYMPOSIUM AND POSTER PRESENTATIONS

Conlon, K., Gonzalez, L., Knowshisgun, K., & Ulmer, J. (2011, August). Exploring trauma

exposure, generation of U.S. residency, and perceived social support among Mexican-Americans and immigrants. Poster presentation at the *199th Annual American Psychological Association Convention*. Washington, DC.

Conlon, K. Gregg, K., Webb, K., & Luna, L. (May, 2011). Predictors of Quality of Life among Mexican-Americans: Trauma exposure and symptoms, age, education, generation, gender, and mental health utilization. Poster presentation at the *Oregon Psychological Association*. Eugene, OR.

Sponaugle, R., Buhrow, W., **Conlon, K.**, Lee-Zorn, C., & Webb, K. (2011, April). Order effects and survey methodology as influences on the reporting of religiosity and pornography use in a Christian population. Poster presentation at the *Christian Association for Psychological Studies*. Indianapolis, IN.

Mock, R., Buhrow, W., **Conlon, K.**, Lee-Zorn, C., & Webb, K. (2011, April). What effect does George Fox University premarital education class have on marital satisfaction: An outcome study. Poster presentation at the *Christian Association for Psychological Studies*. Indianapolis, IN.

Jurecska, D.E., Gathercoal, K.A., Seegobin W., Judd, T., Lee-Zorn, C., Luna, L., **Conlon, K.**, & McConnell, B. (2011, January). Multicultural contributes to the field of Forensic Psychology. A symposium presentation at the *National Multicultural Conference and Summit Research Symposium*. Seattle, WA.

Cradock O'Leary, J., Thurston, N., Moore, K., **Conlon, K.**, & Jenkins, D. (2009, April). Evaluating the Relationship between Empathy and Shame. Poster presentation at the *89th Annual Western Psychological Association Convention*. Portland, OR.

Cradock O'Leary, J., Thurston, N., Moore, K., **Conlon, K.**, & Jenkins, D. (2009, April). Are Shame and Depression Related? Understanding Their Dynamics. Poster presentation at the *89th Annual Western Psychological Association Convention*. Portland, OR.

Koch, C., **Conlon, K.**, Ulmer, J., & Nirschl, K. (2007, May). *Personality and the cocktail stroop effect*. Poster presentation at the *87th Annual Western Psychological Association Convention*. Vancouver British Columbia, Canada.

PUBLICATIONS

Conlon, K. (2007). Methamphetamine: A look at its abuse, treatment, and neurological effects. *Kalos Undergraduate Academic Journal*, 2, 15-27.

RESEARCH EXPERIENCE

Doctoral Dissertation

Preliminary defense passed May 5, 2010

Committee members: William Buhrow, PsyD (chair), Mary Peterson, PhD, Winston Seegobin, PsyD.

Program Evaluation Project

September, 2009 – April, 2010

George Fox University PsyD accreditation

Worked collaboratively with peers to create and implement a research questionnaire measuring student-faculty relationships. Results presented to APA in a written report for re-accreditation evaluation.

George Fox University

September, 2009 – April, 2011

Research Vertical Team

Participate in bi-monthly meetings with a research team for consultation regarding the dissertation progress, research design, and supplemental research. Past activities included scoring 200 protocols for the publication of the Thurston-Cradock Shame Test, and poster presentations at professional conferences.

University of Oregon

March – April, 2007

Research assistantship

Administered the Working At Gaining Employment Skills (WAGES) to male and female incarcerated youth at Hillcrest Youth Correctional Facility.

Supervisor: Deane Unruh, PhD.

George Fox University

January – April, 2007

Research assistantship

Worked independently designing a SuperLab program to test undergraduate volunteers. Duties included administering the Beck Depression Inventory and managing and training other research assistants.

Supervisor: Chris Koch, PhD.

TEACHING ASSISTANTSHIPS

Personality Assessment – Teaching Assistant

January, 2010 – April, 2011

George Fox University PsyD course

Met regularly with first year PsyD students in need of extra assistance in report writing or interpreting personality assessments. Also provided feedback and evaluation for assignments.

Advanced Counseling - Teaching Assistant

September, 2009 – December, 2009

George Fox University Undergraduate course

Lead weekly small groups to assist and guide students to master basic counseling skills. Encouraged personal reflection, here-and-now processing, self-care, and self-awareness. Received weekly group supervision.

Supervisor: Kristina Kays, PsyD.

TEACHING EXPERIENCE

Conlon, K. (2011). A Narrative Therapy approach to Behavioral Health. Presented to the Behavioral Health team, Newberg, Oregon

Conlon, K. (2010). A presentation on Time Limited Psychodynamic Psychotherapy. Orientation training for the Behavioral Health Clinic, Newberg, Oregon.

Conlon, K., & Erb, A. (2010). *Scoring: MMPI-II, MCMI-III, PAI, and 16PF*. Co-lecture for a Psy.D. course on Personality Assessment. George Fox University, Newberg, Oregon.

Conlon, K., & Dickey, A. (2009). *Adolescent delinquency: A look at family dynamics, substance abuse, mental health, and trauma history*. Co-lecture for an undergraduate course on Adolescent Development, George Fox University, Newberg, Oregon.

Conlon, K. (2006). *Shame and guilt*. Guest lecture for women's undergraduate seminar, George Fox University, Newberg, Oregon.

Conlon, K. (2006). *Identity*. Student representative on discussion panel, George Fox University, Newberg, Oregon.

PROFESSIONAL MEMBERSHIPS, AFFILIATIONS, AND GROUPS

Psychodynamic Consultation Group *September, 2009 – April, 2011*
 Hillsboro, Oregon
 Society that meets monthly to present and discuss cases from a psychodynamic perspective.
 Hosted by: Kurt Free, PsyD.

Multicultural Committee *October, 2009 – April, 2011*
 George Fox University
 Lead bi-monthly meetings with 12 peers and faculty member. Responsible for discussing issues of diversity, awareness, and event planning.

APA Division of Psychoanalysis (39) *October, 2010- Present*
American Psychological Association *January, 2008 – Present*
PsiChi National Honors Society in Psychology *March, 2007 – Present*

OTHER PROFESSIONAL EXPERIENCES

Rorschach Immersion: Basic Course In the Rorschach *July, 2009*
 Massachusetts School of Professional Psychology, Boston, Massachusetts
 Attended a 30hr APA accredited intensive course aimed at teaching administration, scoring, and interpretation of the Rorschach, using the Exner Comprehensive System.
 Professor: Terri Burda, PsyD.

PsyD Admissions Selection

February, 2009 – March, 2011

George Fox University

Responsible reviewing applications and co-interviewing prospective students with faculty. Provide feedback about applicant's strengths, weaknesses, and fit for the program.

SERVICE AND VOLUNTEER WORK

Serve Trip Leader– Portland, Oregon

December, 2007 – January, 2008

Was invited to supervise 12 undergraduate students on a weeklong service trip focused on homelessness.

Peer Mentor

September, 2005 -Present

Provide mentorship for two undergraduate students and a first-year PsyD student.

Serve Day

2003 - 2009

Participated in seven consecutive annual Serve Days at a variety of locations including shelters for women, domestic violence victims, and abused children.

ADDITIONAL TRAINING AND EDUCATION

Complex PTSD in Military and Law Enforcement Personnel

August, 2010

Presented by: Sandra Pinches, PhD.

Psychotherapy with Gay, Lesbian, and Bisexual Clients

March, 2010

Presented by: Carol Carver, PhD.

Multi-cultural Counseling: An Alternative Conceptualization

September, 2009

Presented by: Carlos Taloyo, PhD.

Treatment and Teaching Interventions for Children With Autism

April, 2009

Presented by: Gary Mesibov, PhD.

Make Every Session Count: An Attachment-Based, Emotionally-Focused, Interpersonal Approach

October, 2009

Presented by: Hanna Levenson, PhD.

The First Session of Psychotherapy

March, 2009

Presented by: Peter Armstrong, PhD.

Primary Care Psychology

October, 2008

Presented by: Julie Oyemaja, PsyD.

ADHD: What works in Assessment and Intervention (CAB, CA_t-C, CA_t-A)

June, 2008

Presented by: Bruce A. Bracken, PhD.

**The Psychology of Forgiveness in Clinical Practice: The Benefits
and Pitfall of Helping Clients Forgive**
Presented by: Nathaniel G. Wade, PhD.

February, 2008