AN ABSTRACT OF THE THESIS OF

Oresta S. Tolmach for the degrees Honors Baccalaureate of Science in Biochemistry & Biophysics, Honors Baccalaureate of Arts in International Studies in Biochemistry & Biophysics, and Honors Baccalaureate of Arts in Spanish presented on April 18, 2014. Title: The Creation of a Bilingual Children’s Book to Promote Mental Health Services among U.S. Latin@s.

Abstract Approved:

________________________________________

Daniel López-Cevallos

Although U.S. Latin@s are more affected by major depressive disorder than non-Latin@ whites, they are less likely to utilize mental health services. The purpose of this project is to create a children’s book that promotes the utilization of mental health services among U.S. Latin@s with major depressive disorder. This book is targeted at children aged 7-12 and is available in a bilingual version to provide accessible reading material independent of acculturation or education levels. *Ana’s Family is Happy Again* or *La familia de Ana está feliz de nuevo* is about a Latina girl named Ana who, after learning about major depressive disorder through a series of experiences and poignant questions, encourages her uncle to seek care. She learns the difference between sadness and depression, is familiarized with the availability of mental health services, and grows to understand that depression is not shameful or a sign of weakness in difficult circumstances but is a medical condition. By normalizing depression, questioning existing explanatory models, describing a biomedical model, and providing information about available resources, this book aims to promote open discussion about a stigmatized area of health to overcome the internal barriers preventing U.S. Latin@s from utilizing mental health services for major depressive disorder.

Key Words: Latin@ health, children’s literature, major depressive disorder, internal barriers, health promotion, mental health services

Corresponding e-mail address: tolmacho@onid.oregonstate.edu
The Creation of a Bilingual Children’s Book
to Promote Mental Health Services among U.S. Latin@s

by

Oresta S. Tolmach

A PROJECT
submitted to
Oregon State University
University Honors College

in partial fulfillment of
the requirements for the
degrees of
Honors Baccalaureate of Science in Biochemistry & Biophysics (Honors Scholar)
Honors Baccalaureate of Arts in International Studies in Biochemistry & Biophysics
(Honors Scholar)
Honors Baccalaureate of Arts in Spanish (Honors Scholar)

Presented April 18, 2014
Commencement June 2014

APPROVED:

__________________________
Mentor, representing Ethnic Studies and Public Health

__________________________
Committee Member, representing Psychology

__________________________
Committee Member, representing Spanish

__________________________
Dean, University Honors College

__________________________
Nick Fleury, Head Advisor, International Degree Program

I understand that my project will become part of the permanent collection of Oregon State University, University Honors College. My signature below authorizes release of my project to any reader upon request.

__________________________
Oresta S. Tolmach, Author
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Goal of Project</td>
<td>1</td>
</tr>
<tr>
<td>Book Summary</td>
<td>1</td>
</tr>
<tr>
<td>BACKGROUND</td>
<td>3</td>
</tr>
<tr>
<td>Major Depressive Disorder Defined</td>
<td>3</td>
</tr>
<tr>
<td>The “Blues” versus Depression</td>
<td>3</td>
</tr>
<tr>
<td>Diagnosing Major Depressive Disorder</td>
<td>3</td>
</tr>
<tr>
<td>A Biomedical Perspective of Major Depressive Disorder</td>
<td>5</td>
</tr>
<tr>
<td>Psychological Influences</td>
<td>5</td>
</tr>
<tr>
<td>Biological Influences: The Diathesis-Stress Model</td>
<td>6</td>
</tr>
<tr>
<td>The Underlying Biochemistry</td>
<td>7</td>
</tr>
<tr>
<td>Treatment Options for Major Depressive Disorder</td>
<td>14</td>
</tr>
<tr>
<td>Pharmacological Therapy</td>
<td>14</td>
</tr>
<tr>
<td>Non-Pharmacological Biomedical Interventions</td>
<td>16</td>
</tr>
<tr>
<td>Cognitive Behavioral Therapy</td>
<td>17</td>
</tr>
<tr>
<td>Social Support</td>
<td>20</td>
</tr>
<tr>
<td>Major Depressive Disorder among U.S. Latin@s</td>
<td>21</td>
</tr>
<tr>
<td>Major Depressive Disorder and the Immigrant Paradox</td>
<td>21</td>
</tr>
<tr>
<td>Factors Influencing Major Depressive Disorder among U.S. Latin@s</td>
<td>22</td>
</tr>
<tr>
<td>Health Disparities</td>
<td>27</td>
</tr>
<tr>
<td>Internal Barriers to Mental Health Services Utilization</td>
<td>28</td>
</tr>
<tr>
<td>LITERATURE REVIEW</td>
<td>33</td>
</tr>
<tr>
<td>WHY WRITE A CHILDREN’S BOOK</td>
<td>35</td>
</tr>
<tr>
<td>Topic Justification</td>
<td>36</td>
</tr>
<tr>
<td>Significance</td>
<td>36</td>
</tr>
<tr>
<td>TARGET AUDIENCE</td>
<td>37</td>
</tr>
<tr>
<td>CHARACTER DEVELOPMENT</td>
<td>39</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS (Continued)

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILDREN’S BOOK CONTENT</td>
<td>41</td>
</tr>
<tr>
<td>Introduction</td>
<td>41</td>
</tr>
<tr>
<td>Before School</td>
<td>41</td>
</tr>
<tr>
<td>Teased at School</td>
<td>42</td>
</tr>
<tr>
<td>After School</td>
<td>43</td>
</tr>
<tr>
<td>Talking with Ana’s Aunt and Uncle</td>
<td>44</td>
</tr>
<tr>
<td>At the Birthday Party</td>
<td>48</td>
</tr>
<tr>
<td>ILLUSTRATIONS</td>
<td>50</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>51</td>
</tr>
<tr>
<td>Focus Group</td>
<td>51</td>
</tr>
<tr>
<td>Publishing</td>
<td>51</td>
</tr>
<tr>
<td>Dissemination</td>
<td>52</td>
</tr>
<tr>
<td>Summary</td>
<td>53</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>54</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>62</td>
</tr>
</tbody>
</table>
**LIST OF FIGURES**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.</td>
<td>Tryptophan-based biosynthesis of serotonin</td>
<td>9</td>
</tr>
<tr>
<td>Figure 2.</td>
<td>Tyrosine-based biosynthesis of dopamine and norepinephrine</td>
<td>13</td>
</tr>
<tr>
<td>Figure 3.</td>
<td>Perceived etiology of major depressive disorder among U.S. Latin@s</td>
<td>31</td>
</tr>
</tbody>
</table>
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA</td>
<td>American Psychiatric Association</td>
</tr>
<tr>
<td>CBT</td>
<td>Cognitive behavioral therapy</td>
</tr>
<tr>
<td>COI</td>
<td>Community Outreach, Inc.</td>
</tr>
<tr>
<td>DSM</td>
<td>Diagnostic and Statistical Manual of Mental Disorders</td>
</tr>
<tr>
<td>ECT</td>
<td>Electroconvulsive therapy</td>
</tr>
<tr>
<td>G-proteins</td>
<td>Guanidine triphosphate binding proteins</td>
</tr>
<tr>
<td>GPCR</td>
<td>G-protein coupled receptor</td>
</tr>
<tr>
<td>MAOI</td>
<td>Monoamine oxidase inhibitor</td>
</tr>
<tr>
<td>MDD</td>
<td>Major depressive disorder</td>
</tr>
<tr>
<td>NDRI</td>
<td>Norepinephrine-dopamine reuptake inhibitor</td>
</tr>
<tr>
<td>NIMH</td>
<td>National Institute of Mental Health</td>
</tr>
<tr>
<td>NRCT</td>
<td>Standard protocol CBT (Propst et al., 1992)</td>
</tr>
<tr>
<td>PCT</td>
<td>Pastoral counseling treatment (Propst et al., 1992)</td>
</tr>
<tr>
<td>RCT</td>
<td>CBT with religious content (Propst et al., 1992)</td>
</tr>
<tr>
<td>SERT</td>
<td>Serotonin transporter</td>
</tr>
<tr>
<td>SNRI</td>
<td>Serotonin-norepinephrine reuptake inhibitor</td>
</tr>
<tr>
<td>SSRI</td>
<td>Selective serotonin reuptake inhibitors</td>
</tr>
<tr>
<td>TCA</td>
<td>Tricyclic antidepressants</td>
</tr>
<tr>
<td>TMS</td>
<td>Transcranial magnetic stimulation</td>
</tr>
<tr>
<td>WLC</td>
<td>Waiting-list control</td>
</tr>
<tr>
<td>5-HT</td>
<td>5-hydroxytryptamine</td>
</tr>
<tr>
<td>5-HTT</td>
<td>5-hydroxytryptamine transporter gene</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

I would like to thank my committee members for their advice and support as I worked to complete this thesis. Their diverse areas of expertise have helped make this work a success. Thank you to Nick Fleury for his support and encouragement throughout this project. His advice to pursue broader dissemination of this work through film will certainly allow it to reach more individuals. Thank you also to Dr. Andy Karplus for his idea to distribute my project as a coloring book in order to disseminate it further.

I would also like to thank Community Outreach, Inc. for the allowing me to volunteer in their community medical clinic. My time there has given me the wonderful opportunity to meet many Latin@s in the Corvallis community while introducing me to the internal barriers to the utilization of mental health services within that population.

Thank you also to the International Degrees and Education Abroad Programs. The incredible opportunities they have provided for me to study and intern abroad in both Spain and Ecuador have augmented my interest in the Spanish language and Latin@ culture while equipping me for this undertaking.

My deepest thanks to my family and friends for their support throughout this project. Thank you to my roommate and friend, Natalie, for her patient feedback on even the minutest of details and for providing me with the reassurance that I could complete this book. Thank you to my loving family for all of the prayers, encouragement, and mutual excitement that helped to bring this project to fruition.
PREFACE

This project was in part inspired by my volunteer work as a translator and medical clinic coordinator at Community Outreach, Inc. in Corvallis, Oregon. One evening in clinic, as the doctor I was volunteering alongside wrote a prescription for a notably concerned middle-aged Latina to reduce her migraines, I began a friendly conversation with her. As we discussed her family, her concern turned to tears. Evidently, she had been depressed for some time and lacked the social support to cope effectively with what she was experiencing. However, she negated that what she was experiencing was depression attributed to biomedical causes, instead referring to her condition as nervios attributed to stressful relationships.

My experience at Community Outreach introduced me to the roles stigma and explanatory models have on mental health service utilization among U.S. Latin@s. Discovering the inverse relationship between major depressive disorder prevalence and mental health service utilization among U.S. Latinos as compared to non-Latin@ whites has encouraged me to direct my passion for health promotion to a tabooed area of medicine in order to address the internal barriers causing this health disparity. Thus the idea for my artistic endeavor was born.
INTRODUCTION

**Goal of Project**

The purpose of this project was to write a children’s picture book to serve as a springboard to open discussion of major depressive disorder in order to destigmatize major depressive disorder and promote mental health service utilization among U.S. Latin@s. Although surveys reveal that there is a high frequency of major depressive disorder among U.S. Latin@s, this demographic has a lower tendency to seek care than the general population. There is a gap in promoting mental health services through culturally accessible and medically relevant methods for Latin@s, who represent an underserved and rapidly growing population in the United States. Through normalizing major depressive disorder, questioning existing explanatory models, defining the condition through a biomedical approach, and commenting on available mental health services, this book aims to empower more Latin@s to recognize and address major depressive disorder in order to overcome internal barriers to care. This accompanying work will provide the background and rationale for the content of the children’s book.

**Book Summary**

*Ana’s Family is Happy Again*, or *La familia de Ana está feliz de nuevo* is about a Latina girl named Ana who, upon learning about major depressive disorder, helps her uncle seek care for his depression so he can feel well again. Through a series of
experiences and many poignant questions directed at her mother, who is effectively utilizing mental health services for major depressive disorder, Ana learns that depression is a medical condition that individuals need not be ashamed of experiencing. Ana grows to understand that there are resources to help those with depression. As the story continues, Ana interacts with her uncle to encourage him to consider what he views as nerves or homesickness as major depressive disorder. She then guides him to utilize mental health services.
Major Depressive Disorder Defined

The “Blues” versus Depression

Sadness, loneliness, and grief are feelings commonly experienced throughout life, especially in reaction to difficult circumstances. Such feelings typically do not impede normal function. In most cases, people will “bounce back from the blues.” However, as the National Institute of Mental Health (NIMH) describes, there is a difference between the blues and depression. Depression is a medical condition characterized by persistent feelings of sadness and apathy, and may also manifest with somatic symptoms. The emotional and physical problems depression engenders can make everyday tasks difficult and may make life seem as if it is not worth living (NIMH, 2009). The Mayo Clinic (2010) describes that, unlike the “blues,” depression is something that patients cannot just snap out of. Depression is chronic, requiring long-term treatment that often includes pharmacological and/or psychological therapy.

Diagnosing Major Depressive Disorder

Major depressive disorder (MDD), also called clinical depression or unipolar depression, is one of the most severe forms of depression. It can affect all ages and sexes. MDD may be episodic or recurrent (Belmaker & Agam, 2008). According to the NIMH (2009), MDD often prevents individuals from functioning normally, as it interferes with their ability to work, sleep, study, eat, and enjoy once-pleasurable activities.
MDD diagnoses are based upon the defining criteria delineated in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000) guidebook recreated below:

- Depressed mood most of the day, nearly every day
- Loss of interest or pleasure in most activities
- Significant weight loss or gain, more than 5% of weight within one month
- Sleeping too much or not being able to sleep, nearly every day
- Noticeably slowed thinking or movement
- Fatigue or low energy, nearly every day
- Feelings of worthlessness or inappropriate guilt
- Loss of concentration or indecisiveness
- Recurring thoughts of death or suicide, suicide plan, or suicide attempt

To be diagnosed with MDD, individuals must experience at least five of the above symptoms over a two-week period. Experiencing a depressed mood or a loss of interest and pleasure must be one of the symptoms. Symptomology must not be the direct effect of substance abuse or pre-existing medical conditions (*DSM-IV-TR*).

MDD is commonly recurrent and may be lead to death. Indeed, according to the American Psychiatric Association (APA), up to 15% of individuals with severe MDD will commit suicide. This rate is four-fold greater in individuals over 55 years of age (APA).

The prevalence of MDD is greater among females than males, with a ratio of 1.64:1. However, this gender imbalance is likely due to the effect of socialization on reporting MDD symptomology (Romans et al., 2007).
A Biomedical Perspective of Major Depressive Disorder

Psychological Influences

Cognitive theory suggests that individuals with MDD engage in cognitive errors, or have negative coping styles. These include an overemphasis on negative events or an overgeneralization of all situations as negative.

Stressful life events are seen to be strongly related to mood disorders, including MDD. The way that an individual interprets an experience and internalizes or understands its meaning appears to have a greater impact on the individual than the event itself; the extent of perceived control appears to be associated with MDD. Seligman (1975) describes a lack of perceived control over life events as learned helplessness. Under this model, the cognitive errors described by cognitive theory are based in depressive attributional styles, including internal, stable, and global attributions. Internal attributions place blame for negative outcomes on the individual. Stable attributions are developed when an individual believes that all future negative outcomes will likewise be his or her own fault. The global attributions result when individuals believe that the negative events for which they are blaming themselves will disrupt life activities. The combination of these three domains contributes to a sense of hopelessness, maladaptive thinking, and dysfunctional attitudes (Seligman, 1975).

Cognitive behavioral psychology suggests that depression is maintained through a feedback loop engendered by maladaptive thoughts or dysfunctional attitudes (Folkman et al., 1986). Cognitive theory postulates that in this loop, individuals experiencing MDD impose negative meaning to immediate situations or events. These negative thinking habits—characterized by unfair, unrealistic, and self-critical thoughts—engender
negative emotions, including discouragement, sadness, and anxiety. These emotions in turn result in physiological changes, such as altered sleep patterns, fatigue, and changes in brain chemistry that ultimately influence depressive behaviors. Depressive behaviors, including social withdrawal, reduced activity levels, and poor self-care funnel back into negative situational perceptions. These perceptions in turn result in the downward spiral of chronic or recurrent MDD. (Folkman et al., 1986; Garnefski et al., 2001)

**Biological Influences: The Diathesis-Stress Model**

There is a strong genetic contribution to mood disorders; individuals with first degree relatives affected by a mood disorder have elevated rates of mood disorders themselves. Belmaker & Agam (2008) suggest that MDD is 37% hereditable. However all genetically predisposed individuals no not develop MDD. This is in part explained by the diathesis-stress model.

The diathesis-stress model is a psychological theory that serves to explain the development of mental disorders in the context an individual’s predisposition and environmental influences. Although the diathesis-stress model is limited because the development of MDD is considered multi-causal, the model provides a simple way to conceptualized disorder development in a nature-nurture context (Masten, 2001).

As it relates to MDD, diathesis refers to vulnerability or genetic predisposition for the mental illness. Stress refers to any life event that disrupts an individual’s psychological equilibrium and acts as a trigger event for mental illness. Following this model, if the combination of genetic predisposition and stress surpass an individual’s threshold, that individual may develop a mental disorder. For example, if two individuals
are exposed to the same stressors, but only the first has a genetic predisposition to MDD, the first is more likely to develop depression. On the other hand, if an individual has a family history of depression but does not experience stress at a level above his or her threshold, it is unlikely that he or she will develop MDD (Hankin & Abela, 2005).

Stress is significant because it can contribute to a sense of uncontrollability or foster a sense of helplessness and hopelessness, which may in turn activate dormant psychological vulnerabilities (see “Psychological Influences” above). Similarly, stress can affect circadian rhythms, which contribute to MDD symptomology and further activate psychological vulnerabilities. Physiologically, stress elevates cortisol levels in the endocrine system (Djuric et al., 2008). Cortisol is a glucocorticoid hormone released from the adrenal cortex in response to stress. High levels of cortisol can turn on certain genes that genetically predispose individuals to MDD. Similarly, cortisol may affect neurotransmitter systems believed to have a role in MDD pathology (Dinan, 1994).

**Underlying Biochemistry**

*Neurotransmitters and Chemical Signaling*

Neurotransmitters transmit signals from a neuron to a target cell across a synapse. Neurotransmitters are packaged into synaptic vesicles at the neuron terminal, on the pre-synaptic side of a synapse. When an action potential reaches the pre-synaptic vesicles, the vesicles release the neurotransmitters into the synaptic cleft. As the molecules diffuse across the synaptic cleft, they may bind to specific receptors in the membrane on the post-synaptic side of the synapse to transmit a signal, remain in the synapse until they are
ultimately degraded, or be reabsorbed at the pre-synaptic terminal for reutilization (Elias & Saucier, 2006).

The normal function of a neurotransmitter is to transmit a chemical signal across a synapse to a receptor on the target cell. Neurotransmitters coordinate with a class of receptors called G-protein coupled receptors (GCPR), which have seven transmembrane protein domains and function via guanidine triphosphate binding proteins, or G-proteins. Signal reception causes conformational changes within the transmembrane domains of the receptor, which ultimately cause conformational changes in the G-protein to initiate a signal transduction pathway. Different G-proteins can initiate different signaling and catalytic pathways for diverse cellular responses.

Once a signal is transmitted across a synapse, the remaining neurotransmitter molecules in the synaptic cleft can be reabsorbed and recycled at the pre-synaptic terminal through a transport protein channel, called a transporter. Rapid reabsorption of neurotransmitter molecules into pre-synaptic terminals via transporters is the major mechanism for signal termination and neurotransmitter reutilization (Pacholczyk, Blakely, & Amara, 1991). Without this recycling mechanism, neurotransmitter stores in the synaptic vesicles are depleted (Brenner et al., 2007). The importance of the transport system is underlined by the role of transporters as the initial site for the therapeutic action of antidepressant pharmaceuticals (see “Pharmacological Therapy” below) (Pacholczyk et al., 1991). When neurotransmitters are not recycled by transporters, they may be degraded or diffuse out of the synaptic cleft. This results in a net loss of neurotransmitter stores and requires increased levels of neurotransmitter biosynthesis to maintain physiologically normal levels (Brenner et al., 2007).
Abnormal neurotransmitter signaling may result in abnormal physiological changes. Alterations in signaling may be caused by diminished neurotransmitter release from pre-synaptic neurons or impaired signal transduction. Low rates of neurotransmitter release are the result of low stores, either due to low levels of the amino acid precursors, or reduced neurotransmitter reabsorption from the synaptic cleft by transporters. Impaired signal transmission is often due to changes in receptor number or function (Dunlop & Nemeroff, 2007).

Work conducted by Nutt (2008) demonstrated a relationship between the three main monoamine neurotransmitters in the brain and the symptoms of major depression. Nutt (2008) postulates that specific symptoms of depression could be the result of specific neurochemical mechanisms associated with particular neurotransmitters.

**A Tryptophan Derived Monoamine Neurotransmitter: Serotonin**

Serotonin, or 5-hydroxytryptamine (5-HT), is a monoamine neurotransmitter synthesized from the essential amino acid tryptophan in the pathway delineated below in figure 1 (Fernstrom & Fernstrom, 2007).

![Figure 1. Tryptophan-based biosynthesis of serotonin](image)

Figure 1. Tryptophan-based biosynthesis of serotonin
Tryptophan is oxidized by tryptophan hydroxylase to form 5-hydroxytryptophan, and then decarboxylated by aromatic amino acid decarboxylase to form 5-hydroxytryptamine, or Serotonin. Structures generated with Chemskech ©Advance Chemistry Development.
Serotonin is produced by the pineal gland and, among other roles in the body, functions as a neurotransmitter in the central and peripheral nervous systems. Serotonin relays messages that influence mood, libido, appetite, sleep, memory, learning, temperature regulation, and social behavior (Ramamoorthy et al., 1993). A lack of serotonin can lead to anxiety, obsessions, and compulsions (Nutt, 2008).

Lapin and Oxenkrug (1969) proposed the “serotonin hypothesis” of depression, which links decreased serotonergic activity with an increased vulnerability for depression. Indeed, some individuals with MDD have been found to have lower concentrations serotonin metabolites in their cerebrospinal fluid and brain tissue.

Although decreased serotonergic activity may be due to a number of factors—including low production of serotonin in the brain, low stores of serotonin at the pre-synaptic terminals, and low stores of the essential amino acid tryptophan—reduced serotonergic activity is most often evident at the receptor and transporter levels (López-Figueroa et al., 2004).

Serotonin receptors are linked to phosphatidylinositol hydrolysis, generating the second messengers diaacylglycerol and inositol-1,4,5-trisphosphate to amplify and transmit a signal to the brain (Sulser, 1987). Low receptor density on the post-synaptic terminal reduces signal transmission, resulting in low levels of serotonin in the prefrontal cortex (Stockmeier et al., 1998). Further work by López-Figueroa et al. (2004) showed that reduced levels of the serotonin receptor in the hippocampus of the brain are likewise correlated with increased incidence of MDD.

Reduced serotonergic activity has also been demonstrated among individuals with MDD at the transporter level. Serotonin reuptake at the pre-synaptic terminal is mediated
by a single transporter protein, called the Serotonin Transporter (SERT). SERT quickly terminates serotonin action and regulates the available levels of serotonin for signal transduction at post-synaptic receptors by reabsorbing and recycling serotonin at the pre-synaptic terminal. Serotonin uptake rate depends upon SERT distribution on the pre-synaptic membrane (Ahmed et al., 2008). To regulate uptake, Brenner et al., (2007) postulate that the body alters the density of SERT molecules in a negative feedback mechanism in which elevated levels of serotonin by decreasing SERT density. SERT proteins are coded for by the 5-hydroxytryptamine transporter gene (5-HTT). Protein synthesis is modulated at the transcriptional level by a polymorphism within the regulatory region of the gene. Lesch et al (1996) show that the short variant of the polymorphism reduces the transcriptional efficiency of the gene promoter, resulting in decreased SERT expression and decreased serotonin reuptake at the pre-synaptic terminal. Reducing reuptake may deplete stores of serotonin to ultimately reduce serotonin signal transmission. Physiologically, the alternative polymorphism also manifests as uncoupling of the feedback circuit that terminates negative affect after a negative stimuli. Indeed, Caspi, et al. (2003) demonstrate that heterozygotes or homozygotes for the short allele of the 5-HTT promoter polymorphism exhibited more depressive symptoms in relation to stressful life events than do homozygotes for the long allele. With this developmentally abnormal emotion regulation, carriers of the short allele 5-HTT polymorphism are genetically susceptible to depression. This potentially provides a mechanism for the diathesis-stress model of MDD describe above (see “Biological Influences: The Diathesis-Stress Model”) (Caspi, et al. 2003; Pezawas et al., 2005).
The Tyrosine Derived Monoamine Neurotransmitters: Dopamine and Norepinephrine

Dopamine was identified as a potential neurotransmitter in the brain in the late 1950s (Carlsson, 1959). Dopamine is a monoamine neurotransmitter synthesized from tyrosine through the pathway delineated below in figure 2 (Fernstrom & Fernstrom, 2007).

Dopamine neuronal signaling pathways have roles in behaviors including reward-seeking, motivation, and responsivity (Swerdlow & Koob, 1987). Work conducted by Wilner (1983) suggests that disruptions in dopaminergic pathways lead to the behavioral symptoms associated with mood disorders. Weiss et al. (1981) further suggest that the symptoms of major depression are related to stress-induced changes in dopaminergic transmission within the forebrain. As with serotonin signal processing, deviations from the normal neuronal processing mechanisms that are controlled by dopamine cause abnormal physiological function (Luedtkea & Mach, 2003). Reduced dopaminergic activity may contribute to specific behavioral symptoms, including loss of motivation or pleasure (Klimek, Schenck, Han, Stockmeier, & Ordway, 2002).

However, dopamine neurotransmission is not considered to be directly involved in MDD symptomology. Indeed, standard antidepressants are postulated to improve serotonergic or noradrenergic signaling, which subsequently act upon dopaminergic pathways (Dunlop & Nemeroff, 2007). Although dopamine precursors and dopamine agonists have shown to have therapeutic roles in MDD, most antidepressant treatments do not directly enhance dopamine neurotransmission. This may account for the persistence of residual symptoms upon pharmacological treatment—including impaired
motivation, concentration, and pleasure—if dopamine is not fully activated by serotonin or norepinephrine input (Kapur & John Mann, 1992; Dunlop & Nemeroff, 2007).

Figure 2. Tyrosine-based biosynthesis of dopamine and norepinephrine

Tyrosine is oxidized by tyrosine hydroxylase to form dopa, and then decarboxylated by aromatic amino acid decarboxylase to form the neurotransmitter dopamine. Dopamine is oxidized by dopamine β-hydroxylase to form the neurotransmitter norepinephrine. Structures generated with Chemsketch ©Advance Chemistry Development.

Norepinephrine is a monoamine neurotransmitter synthesized from tyrosine through the pathway delineated above in figure 2 (Fernstrom & Fernstrom, 2007). Norepinephrine receptors are the beta-adrenoceptors, a class of GPCRs linked to the adenylate cyclase pathway, which uses cyclic adenosine monophosphate as a second messenger to amplify signal transmission in the brain. Sulser (1987) has demonstrated that correct serotonergic neuronal input is required for the proper functioning of beta-adrenoceptors. Thus, proper norepinephrine signal transmission is linked to proper serotonin signal transmission. There is also cross-talk between norepinephrine and dopamine pathways, which further influences pleasure seeking behavior (Dunlop & Nemeroff, 2007). Although current literature has left norepinephrine with a secondary
role to serotonin in underlying pathophysiology of depression, decreased norepinephrine signal transmission may be related to alertness, energy, anxiety, attention, motivation, and interest in life (Nutt, 2008; Moret & Briley, 2011).

**Treatment Options for Major Depressive Disorder**

Understanding MDD from a biomedical perspective—through the lens of psychology, biology, and the underlying biochemistry—provides a basis for understanding how abnormal pathology may engender abnormal function. Similarly, a biomedical perspective provides a way to understand biological treatments of MDD and has led to the development of many effective pharmacological therapies for the condition. However, many individuals with MDD also benefit from non-pharmacological interventions, consultations with mental health specialists, or counselling sessions in individual or support group settings. The types or combinations of mental health services (MHS) utilized for effective therapeutic results are highly variable between individuals.

**Pharmacological Therapy**

A primary care physician or psychiatrist can prescribe medications to relieve depressive symptoms. There are several classes of antidepressant medications available for MDD, including selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), norepinephrine and dopamine reuptake inhibitors (NDRIs), tricyclic antidepressants (TCAs), monoamine oxidase inhibitors (MAOIs), and atypical antidepressants.
The reuptake inhibitors, including SSRIs, SNRIs, and NDRIs, decrease depressive symptoms by competitively inhibiting transporter-mediated neurotransmitters reuptake at the pre-synaptic terminal. Inhibiting reuptake increases neurotransmitter concentrations in the synapse, thereby increasing signal transmission post-synaptically (Iversen, 2006).

TCAs are a particular class of competitive reuptake inhibitors named for their triple ring structure. TCA can act upon serotonin, norepinephrine, and dopamine pathways. However, most TCAs have negligible affinity for the dopamine transporter. TCAs tend to cause more severe side effects than SSRIs, and are not prescribed unless SSRIs are ineffective. However, TCAs may be more effective in the case of melancholic MDD (Mitchell & Mitchell, 1994).

MAOIs act by inhibiting the activity of monoamine oxidases, enzymes which breakdown monoamines via deamination. Preventing the breakdown of monoamine oxidases inhibits the breakdown of the monoamine neurotransmitters serotonin, norepinephrine, and dopamine. This increases neurotransmitter concentrations in the synapse for increased signal transmission. MAOIs are not prescribed unless other medications have been ineffective, as the side effects of MAOIs may be very severe. Indeed, MAOIs have adverse effects when taken with birth control, decongestants, and certain herbal supplements. MAOIs also require a strict diet because interactions with tyramine—found in foods including cheese, pickles, and wine—can be dangerous or even deadly (D’Andrea, Nordera, Perini, Allais, & Granella, 2007).

Atypical antidepressants include other medications used in tandem with antidepressants for short-term symptom-specific management. These include mood stabilizers, antipsychotics, sedatives, stimulants, and anti-anxiety medications
The combination of antidepressant medication to effectively treat depressive symptoms varies between individuals. It may require several adjustments to a drug regimen before finding a combination that works effectively. Additionally, some pharmaceuticals may take four weeks or longer for full effect to take hold and for side effect to subside. This may engender compliance issues. However, abruptly stopping treatment or missing several doses can cause withdrawal-like symptoms and a sudden worsening of depression. Thus it is important to work with the prescribing physician to find an appropriate pharmacological treatment if one is deemed necessary (Mayo 2010).

**Non-Pharmacological Biomedical Interventions**

Electroconvulsive therapy (ECT) passes electrical currents through the brain to instantly alter levels of neurotransmitters in the brain. This type of treatment offers immediate relief of even the most severe depressive symptoms. ECT is usually used as a last resort for patients who cannot take or do not respond well to antidepressant pharmaceuticals. ECT may also be used for individuals who are at a high risk of suicide. Side effects include headaches and temporary memory loss (APA, 2008).

Transcranial magnetic stimulation (TMS) treatment uses a coil placed against the scalp to send brief magnetic pulses to the brain. These pulses stimulate mood-regulating nerve cells in the brain to reset function. For greatest effect, TMS therapy requires five treatments per week for up to six weeks. Like ECT, TMS is typically used for individuals who have not responded to antidepressant medication (O'Shea & Walsh, 2007).

Both ECT and TMS, though effective, are not commonly used to treat depressive symptoms. Within biomedicine, pharmacological therapies are favored.
Cognitive Behavioral Therapy

Cognitive behavioral therapy (CBT) is one of the most effective, evidence-based treatments for MDD. (Blackburn et al., 1981; Dobson, 1989; Fava et al., 1998) The therapy has its basis in cognitive behavioral psychology (see “Psychological Influences” above). The general approach to CBT, outlined by Beck et al (1979), involves guiding clients through structured learning experiences while teaching them to recognize and reevaluate maladaptive thought processes. During these guided experiences, clients monitor and write down their negative thoughts in an attempt to recognize how thoughts or feeling influence their physiology and behavior. Therapists help clients to modify underlying maladaptive assumptions and beliefs so that they can react to triggering events with more adaptive coping skills. Through active self-monitoring during therapy sessions and homework assignments, therapists gradually expose clients to a greater number of potentially rewarding experiences. Within MDD treatment, these therapeutic activities and strategies typically include psychoeducation, guided discovery, Socratic questioning, role playing, imagery, and behavioral experiments. Although a full course of treatment with CBT is considered to be 14-16 sessions, most clients show remission of depressive symptoms within 8-12 sessions. It is often helpful for clients to participate in occasional sessions throughout the year following treatment completion (Beck et al., 1979).

A meta-analysis performed by Dobson (1989) showed that CBT for MDD is not only effective, but often superior to alternative interventions. Based on a comparison of patients' Beck Depression Inventory scores before and after treatment, this meta-analysis suggested that CBT is superior to pharmacological therapy, behavioral therapy, psychotherapy, and non-intervention demonstrated through waiting-list client controls.
Further studies by Hollon, Shelton, & Loosen (1991) showed that CBT alone is superior to combined CBT-pharmacological treatment.

A study by Blackburn et al (1981) comparing CBT with pharmacological therapy has also indicated that CBT is as effective as pharmacological therapy, regardless of the severity of the MDD symptoms. Additionally, Dobson (1989) showed that the degree of change associated with CBT was not significantly related to the length of therapy.

Not only is any degree of CBT more effective in treating MDD than other interventions, but CBT during the acute episode of MDD, either alone or in combination with medications, may reduce the risk of subsequent relapse following the termination of treatment (Hollon et al., 1991). Work by Fava et al. (1998) further supported that CBT may substantially lower relapse rates of MDD among clients successfully treated with antidepressants. The study compared relapse rates of forty patients with recurrent MDD whose residual symptoms were treated with either clinical management or CBT supplemented with lifestyle modifications and well-being therapy. The CBT group was significantly less affected by residual symptoms after discontinuation of antidepressant drugs than the group in clinical management. Similarly, follow-up studies with both test cohorts two years after drug discontinuation suggested that the CBT group experienced lower relapse rates than the clinically managed group, with relapse occurring in 25% and 80% of cases for each group, respectively. This work challenges the assumption that long-term pharmacological therapy is the only method to prevent relapse in clients with recurrent MDD. Pharmacological therapy may be necessary for some clients. However, CBT may be a viable alternative for long-term effectiveness and can ameliorate residual MDD symptoms while reducing the likelihood of relapse (Fava et al., 1998).
Although CBT has been found to be an effective treatment for MDD, Propst et al. (1992) suggests that it may be underutilized by some populations because the treatment focuses on values such as personal autonomy and self-efficacy, which may clash with the cultural values of some populations. Specifically, Propst et al. (1992) address the idea that religious individuals may regard CBT as antagonistic to their dependence on a divine being. Indeed, (Larson et al., 1989) suggest that highly religious individuals underutilize all forms of mental health services, resulting in a segment of the U.S. population that is in need of care but is not seeking or receiving culturally appropriate treatment. To study CBT efficacy among religious individuals, Propst et al. (1992) provided two versions of CBT treatment to two cohort of twenty self-identified religious individuals. The first group received CBT with religious content (RCT), while the second group received standard protocol CBT (NRCT). Alongside these cohorts, the study assessed the outcomes for a group of waiting-list control (WLC) individuals who received no intervention, as well a group of pastoral-counseling individuals (PCT) who received counseling without the active elements of CBT. Propst et al (1992) demonstrated that individuals in the RCT and PCT cohorts reported significantly lower rates of post-treatment depression than individuals in the NRCT cohort. All three treatment regimens superseded the immediate and two-year follow-up outcomes of individuals in the non-intervention WLC cohort. Thus, it appears that among religious individuals, MDD treatment efficacy is influenced by religious foundations more than it is affected by the active elements of CBT (Propst et al., 1992).
Social Support

An extrapolation of the correlation identified by Propst et al (1992) suggests that in the absence of access to CBT, patients who talk about their experience with depression may have better mental health outcomes. This efficacy may be attributed to the value of social support in treating MDD. Indeed, George et al (1989) suggest that the element of social support acts as a protective barrier against the development and recurrence of MDD. George et al (1989) state that the size of an individual’s social network and the subjective quality of the social support he or she experiences are significant elements in MDD. However, subjective social support is most strongly associated with MDD, indicating that there is a difference between involvement in and quality of interpersonal relationships (George et al., 1989).

The role of positive social support in MDD is further supported by Seligman, Tayyab, & Parks (2006). Seligman et al (2006) suggest that increasing positive emotion, engagement, and meaning may significantly decreased levels of mild-to-moderate MDD. This correlation appeared to be upheld through a one-year follow-up study. Positive social support, as compared to a non-supportive pharmacological therapy treatment regimen, was related to higher remission rates for MDD.

The roles of positive affect and social support in treatment and prevention of relapse in MDD should not be overlooked and are especially important from an economical perspective. Individuals belonging to groups of low socioeconomic status or medically uninsured populations may underutilize any for-profit clinically-based treatment regimens due to cost barriers impeding access to care. The problem of providing effective care alternatives to these individuals at little or no cost can be
ameliorated by employing the protective and preventive barrier of social support.

Similarly, support groups or counseling services, especially those offered at no cost, can be a good resource for individuals of low socioeconomic status that need an effective support system.

**Major Depressive Disorder among U.S. Latin@s**

**Latin@ Demographics in the United States**

The U.S. Census (2012) reports that Latin@s make up 16.9% of the population of the United States. Latin@s are the largest ethnic minority in the United States. The U.S. Census Bureau estimates that there are currently 53 million Latin@s and projects that there will be 100 million or more Latin@s in the United States by 2050. The U.S. Latin@ population is comprised of two main subgroups, Latin@s of Mexican origin (66.1%) and Latin@s of Puerto Rican origin (9%). Nearly one third of individuals in both groups meet poverty criteria. Only one half of Latin@s of Mexican origin and two thirds of Puerto Rican Latin@s over age 25 have completed high school.

**Major Depressive Disorder and the Immigrant Paradox**

Latin@s worldwide are at an overall lower risk for all psychiatric disorders as compared to non-Latin@ whites (Alegria et al., 2008). Most psychiatric disorders are more prevalent in the United States than in other parts of the world (Kessler et al., 2003). Thus, it is not surprising that U.S. Latin@s report higher lifetime incidence of MDD than non-immigrant Latin@s. Alegria et al (2008) show that there is an Immigrant Paradox among U.S. immigrants from Mexico. Recent Mexican immigrants tend to be healthier
than the average U.S. American. Despite lower socioeconomic status, a common corollary of health outcomes, immigrants have a lower prevalence of chronic disease and a lower mortality rate than non-immigrant U.S. Americans. However, initial health superiorities of immigrants erode with time lived in the United States. Indeed, after five years or more in the United States, even with statistical age adjustments, Latin@s are 1.5 times more likely to develop a chronic illness than when they first immigrated. Within one generation, Latin@ health outcomes are as poor as those of the average U.S. American of a similar socioeconomic status.

Although recent immigrant Latin@s are at a lower risk for MDD than non-Latin@s, any apparent low need for MHS among Latin@s will gradually shift toward higher need (Hough et al., 1987; Alegria et al., 2008). A survey by the Center of Disease Control in 2005 estimates that 6.3% of U.S. Latin@s of Mexican origin had MDD, as compared to 4.8% of non-Latin@ whites (Pratt & Brody, 2008). The disparity in prevalence of MDD among these two demographics is likely to increase due to the Immigrant Paradox and the unique factors contributing to MDD among U.S. Latin@s.

Factors Influencing Major Depressive Disorder among U.S. Latin@s

As noted above, the diathesis-stress model serves to explain the development of mental disorders in the context an individual’s genetic predisposition and environmental influences. If an individual predisposed to MDD reaches his or her stress threshold, it is likely that he or she will develop the disorder (Hankin & Abela, 2005). U.S. Latin@s experience unique stressors as compared to non-Latin@ whites, which may contribute to higher prevalence of MDD in this demographic.
**Acculturation and Acculturative Stress**

Acculturation refers to the psychosocial changes an individual experiences upon interacting with another culture (Alvidrez, Azocar, & Miranda, 1996). The extent of acculturation depends on changes in attitudes, behaviors, identity, and values as a result of contact with the host culture (Berry, 1990). The more acculturated an individual is, the less of the traditional culture will retain in favor of the new culture. Acculturative stress arises from the process of acculturation (Williams & Berry, 1991).

The role of acculturation is particularly important among U.S. Latin@s who maintain closer ties to their native country by preserving their language and cultural characteristics. Because most Latin@s tend to maintain strong cultural identities, the process of integrating the cultural characteristics of the majority group with traditional cultural beliefs and values may be challenging and represent a significant stressor (Kouyoumdjian et al., 2003).

Acculturative stressors that Latin@ immigrants are likely to experience include status inconsistencies, role conflict, low socioeconomic status, difficulties in communication, leaving behind family and friends, and racism (Salgado de Snyder, 1987; Williams & Berry, 1991; Padilla & Perez, 2003). Many migrating Latin@s experience a number of these stressors, which places them at risk for experiencing acculturative stress. Studies suggest that high levels of acculturative stress may increase the risk for the development of psychological problems, including MDD (Hovey & King, 1996; Williams & Berry, 1991).

To date, the findings on the mental health of immigrant Latin@s have been mixed. Research has revealed inconsistent findings in the relationship between
acculturation level and mental health status. Despite the empirical literature on the association between acculturation and mental health, there does not appear to be any clear conclusive evidence regarding the specific direction of the relationship between acculturation and mental health status in Latin@s.

These data may in part be confounded by the role of family support as a protecting factor against major depressive disorder. An analysis of self-reported mental health status by Mulvaney-Day, Alegría, & Sribney (2007) suggests that relational support lends a strong protective effect against MDD, regardless of socioeconomic or language status.

**Status Inconsistency and Role Conflict**

Status inconsistency is experienced when individuals maintains some markers of high socioeconomic status while experience other markers of low socioeconomic status. An example often seen among Latin@s is that in their native countries they were highly educated and respected members of society, but upon immigrating to the host country were employed in blue collar positions and faced the reality of racism and discrimination against them as immigrants. Rubel (1964) suggests that in trying to reconcile divergent status markers, individuals facing status inconsistencies deal with chronic stress.

Role conflict engenders stress through a similar model. Role conflict occurs when individuals experience a discord with between their ideal or societally-acceptable roles and their actual roles (Rubel, 1964). For example, in communities with traditional gender roles, men may experience role conflicts if they face unemployment while their wives become the family breadwinners. When an individual’s ideal and real roles are congruent,
he or she experiences low levels of stress. On the other hand, if an individual’s ideal and real roles are highly divergent, that individual may experience high levels of stress.

**Unique socioeconomic stressors among Latin@s**

Socioeconomic status (SES) is a measure of relative work experience and social position based on income, occupation, and education. Individuals with low SES are more vulnerable to chronic stress than individuals from middle and upper socioeconomic background. Thus, regardless of acculturation level, Latin@ who find themselves in economically challenging environments face a higher risk of socioeconomic stress (Kouyoumdjian et al., 2003). Because low SES is associated with greater exposure to stress, it has been correlated with higher rates of depression (Adler et al., 1994). Indeed, socioeconomic factors are believed to strongly correlate with MDD development.

As noted above, roughly half of U.S. Latin@s have a completed a high school education and nearly one third meet poverty criteria (U.S. Census Bureau, 2012). A Pew Research Center analysis of U.S. Census Bureau data from 2009 reports that the median wealth of Latin@ households is 18 times less than that of non-Latin@ white households. This represents a widening wealth gap, as the net worth of Latin@ households has decreased by 66%, from $18,359 in 2005 to $6,325 in 2009. In this four year period, this was the largest percentage drop among all ethnic groups (Taylor, 2011).

Accounting for these lopsided economic shifts are the recession and housing meltdown occurring from 2007 to 2009. Although plummeting home values reduced household wealth across all ethnic groups, Latin@s were disproportionately affected by the housing market collapse. Not only are the greatest populations of Latin@s centered in the geographic regions most affected by the housing meltdown, but Latin@s derived
nearly two-thirds of their net household wealth from home equity. Since the official end of the recession in mid-2009, the housing market in the U.S. has remained in a slump even though the stock market has recaptured much of the value it lost from 2007 to 2009. Given that 24% of Latin@s have no other assets apart from home equity, and a lower share of Latin@s own stocks than the general population, the stock market rebound since 2009 is likely to have benefited non-Latin@ households more than Latin@ households. Indeed, the recession has paralleled a 42% rise in median levels of debt accrued by Latin@ households, reduced household wealth, and accompanied falling homeownership rates among Latin@s (from 51% to 47%) due to foreclosure (Taylor, 2011).

The fact that Latin@s were disproportionately affected by the housing meltdown is significant because housing insecurity contributes to socioeconomic stress. Cagney (2014) demonstrates that increases in neighborhood-level foreclosure represent an important socioeconomic risk factor for depression in older adults. Thus, the impact the housing downturn has had on the SES of U.S. Latin@s may be a unique contributing factor for the development of MDD in this demographic.

**Racism**

Although higher socioeconomic status typically correlates to improved health outcomes and reduced incidence of MDD, Latin@s of high SES are not completely protected from socioeconomic stressors. Among ethnic minorities, racism has emerged as a social factor contributing to socioeconomic stress (Smith 2008). The cumulative impact of racism experience over one's lifetime is a significant chronic stressor that can even outweigh the benefits of higher economic status (Strain, 2008).
Health Disparities

Although there is a higher prevalence of MDD among U.S. Latin@s than the general population, Latin@s who require care are much less likely to receive MHS than non-Latin@s. Studies by Cook et al (2014) show that 27% of U.S. Latin@s with MDD utilize MHS, as compared with 40% of non-Latin@ whites. Immigrant Latin@s are even less likely to seek treatment for MDD, with only 4% receiving MHS (Hough RL et al., 1987; Nadeem et al., 2007).

Among individuals who seek MHS, Latin@s are more likely to be served by physicians who are unable to detect an existing mental health problem due to lack of cultural competency. Latin@s are also less likely than non-Latin@ whites to receive evidence-based MHS from their general medical provider.

Health disparities are present at the level of traditional access and service use barriers (external barriers), as well as at the level of individual care-seeking behavior (internal barriers)(Cabassa et al., 2006). External barriers include lack of health insurance, inability to pay for care, discrimination and distrust, lack of bilingual providers, and lack of culturally congruent MHS. External barriers may be at the institutional, interpersonal, or communities level and often require health policy intervention to reduce inequity (Cabassa et al., 2006). Internal barriers are influenced by how an individual perceives MDD, as well as his or her attitudes towards treatment (Cabassa, Lester, & Zayas, 2007). This project will focus on internal barriers to MHS utilization, as the nature of this project has more leverage at the personal level. Moreover, even if external barriers to care utilization were removed, residual internal barriers would continue to prevent care utilization and compliance if left unaddressed.
Internal Barriers to Mental Health Services Utilization

Stigma

There are two primary types of stigma: public-stigma and self-stigma. As Corrigan (2004) defines it, public-stigma is a naïve public endorsing a prejudice or stereotype about a group. Self-stigma is the result of members of a stigmatized group internalizing public stigma. Corrigan (2004) suggests that public-stigma leads to self-stigma, which influences MHS utilization (Corrigan, 2004). Indeed, self-stigma is what the U.S. Department of Health and Human Services (1999) calls “the most formidable obstacle to future progress in the area of mental illness and health.”

Stigma is manifest in language, behavior, and disrespect in interpersonal relationships. Thus, Corrigan (2004) suggests that people avoid being labeled as mentally ill in order to avoid damaging interpersonal interactions and to blunt negative statements that may reduce self-esteem and self-efficacy. Sirey et al (2001) further support the idea that experiencing shame and avoiding treatment are correlated. Using the Scale of Perceived Stigma developed by Link et al (1999), Sirey et al (2001) suggest that research participants who expressed a sense of shame from personal experiences with mental illness were less likely to be involved in treatment.

Hamre et al (1994) demonstrate that one-third a cohort surveyed in their study believed there to be a significant difference between individuals with and without mental illness. A commonly held stereotype about individuals with mental illness, including MDD, is that these individuals are unable to live competently and independently in the real world. Additionally, individuals with MDD are considered to be responsible for the
onset and continuation of their disorder due to their weaknesses of character (Hamre et al., 1994).

Although many individuals report stigma concerns in talking to care providers about mental health issues, the role that stigma as barrier to MHS utilization among Latin@s is controversial. Alvidrez (1999) suggests that Latinas are less likely to endorse beliefs that mental illness carries a stigma than European Americans and African Americans. Contradictorily, a study by Nadeem et al (2007) suggests Latina women are more likely than non-Latina white women to endorse stigma concerns, with concerns greatest among immigrant Latinas. However, it has been proposed that ethnic minorities, who already face prejudice, suffer double stigma when confronted with mental illness. The combination of these sources of stigma may be responsible for low MHS utilization in this population (Gary, 2005).

Family shame has also been suggested to be a significant predictor of treatment avoidance. Self-stigma internalized from familial beliefs that mental illness is a disgrace to the individual and/or family has been postulated to serve as a barrier to MHS utilization (Leaf, Bruce, & Tischler, 1986).

Familism

Familism is a core characteristic of Latin@ culture and differentiates attitudinal views between Latin@ and non-Latin@ whites. Some factors involved in familism include the belief that the family shares responsibility for an individual’s problems and that mental illness is best treated within the family (Sabogal et al., 1987; Edgerton & Karno, 1971). Indeed, Alvidrez (1999) suggests that Latin@s strongly endorsed the idea that mental health problems should not be discussed outside of the family. Leaf et al
(1986) have postulated that family perceptions of mental illness are major deterrents for MHS utilization among Latinas with mental illness, including MDD.

**Cultural Perceptions, Linguistics, and Explanatory Models**

Kleinmann (1987) suggests that explanatory models, or the way an individual associates an illness and clinical care to social and cultural factors, influence an individual’s personal experience of an illness and determine what types of treatment he or she deems appropriate. The perceived etiology of MDD plays a large role in deriving linguistic labels that define the condition and, by extension, influence patterns of care-seeking behavior. Medical and linguistic anthropologists have demonstrated that many Latin@s describe and categorize mental illness with the labels *nervios* (nerves), *fallo mental* (mental deficiency or failure), and *locura* (craziness). *Nervios* is the most widely studied and used idiom, especially in cases of MDD. *Nervios* describes symptomology including fear, anxiety, negative affect, anger, worry, and loss of control. Each response is thought to be precipitated by to stressful life circumstances (Cabassa et al., 2007).

Conceptually, the term *nervios* is commonly associated with situational or emotional factors. Men tend to report failures to meet expected social roles, including loss of work or failure at school, as triggers for *nervios*. Women tend to report interpersonal problems, such as failures of romantic relationships and divorce, as triggers for *nervios*. Some individuals may also maintain that *nervios* is the result of sin or moral transgression (Alvidrez, 1999). The perceived situational and emotional factors contributing to *nervios* are delineated in figure 3, adapted from Cabassa et al (2007).
Figure 3. Perceived etiology of major depressive disorder among U.S. Latin@s

Interpersonal and social problems were the largest reported cause of MDD. Medical causes for MDD were only reported by 18% of surveyed individuals. Causes were not mutually exclusive and therefore percentages total more than 100. Graphic adopted from Cabassa et al., 2007.

Conceptualizations of MDD are further influenced by SES. Individuals of higher SES attribute MDD etiology to biomedical causes rather than situational or emotional factors more frequently than individuals of lower SES. Recent immigrants and less acculturated Latin@s also rely more heavily upon situational and emotional factors in their explanatory models (Cabassa et al., 2007). Overall, Alvidrez (1999) suggests that Latinas are less likely than non-Latin@ white women to endorse biomedical causes for MDD.

Because the term nervios among Latin@s has conceptually shifted the etiology of MDD from a biomedical explanatory model to one influenced by situational and emotional factors, it is less likely Latin@s utilizing this terminology will seek treatment
for MDD symptomology. Indeed, Alvidrez (1999) suggests that when individuals hold the view that MDD is the result of shortcoming or personal and emotional weakness, they may be more reluctant to seek formal help for their problems, especially in a mental health setting (Alvidrez, 1999).

When care is sought, etiological perceptions influence MHS utilization patterns. Explanatory models can impact compliance to treatment (Dressler, 1980). Thus, if Latin@s do not accept biomedical models to explain MDD, it is likely biological treatments will not be adhered to. Indeed, Latin@s are less likely to find pharmacological therapy acceptable to treat MDD, often view antidepressants as addictive, and prefer counseling over pharmacological therapy (Cooper et al., 2003).

**Spirituality and Fatalism**

Approximately 70% of Latin@s profess to be Catholic, translating into 29 million Catholic Latin@s in the United States. Additionally 23% of Latin@s, translating to 9.5 million, profess to be Protestant or "other Christian" (including Jehovah's Witnesses and Mormons). Only 0.37% of Latin@s identify as agnostics or atheists (Murray, 2013). Religious belief is indirectly related to reduced frequency of depression, because religious belief is linked with lower levels of hopelessness (Murphy et al., 2000). However, individuals who hold the view that MDD is the result of sin or moral transgression may be more reluctant to seek MHS due to religious fatalism, or the belief that it is one's lot it life to have MDD (Alvidrez, 1999). Indeed, as noted above, highly religious individuals underutilized MHS. This especially true of therapies that clash with personal beliefs (Larson et al., 1989). Efficacy of MHS, when utilized, is also reduced when therapy clashes with personal religious beliefs (Propst et al., 1992).
LITERATURE REVIEW

There are very few books written about MDD at a child’s reading level. All of the books reviewed were written from the perspective of the child protagonist experiencing depression. As such, many books incorporate themes about recognizing emotions and feelings. Books that normalize feelings of sadness include *When I’m Feeling Sad*, by Trace Moroney, *Feeling Sad*, by Joy Berry, and *Today I Feel Silly*, by Jamie Lee Curtis. Others, such as *I Want a Hug* by John Rowe, *Lonely Moose* by John Segal, and *Misery Moo* by Jeanne Willi, illustrate the power of reaching out to someone who is sad.

Although these approaches might be advantageous for children experiencing depression, they do not define MDD from a biomedical perspective. Indeed, after extensive literature review, I have concluded that few children’s books currently available explain MDD in the context of biomedicine. This represents the first significant gap in children’s literature related to MDD. However, as a review of children’s non-fiction literature reveals, it is possible to describe medical and scientific concepts in ways that are comprehensible to children. *El cerebro*, by Lisa Greathouse, *El cuerpillo humano*, by Anita Caneri, *The brain: our nervous system*, by Seymour Simon, and *Brain*, by Anna Sanderman each provide simple overviews of the anatomy and physiology of the nervous system. These books describe the nervous system as a message-relay system and teach that dysfunction in the nervous system may result in pathological information processing, thinking, and executive functioning.

Although these concepts are described in children’s non-fictional literature, they typically do not carry over into works of fiction. *Taking Depression to School* by Kathy
Khalsa is one of the few books that simplify the concept of depression to help children understand the condition. *Taking Depression to School* is also a good example of a children’s fiction that simultaneously reinforces the fact that children with MDD are loved and accepted just the way they are in order to normalize depression.

While some books normalize feelings of sadness to address the stigma surrounding MDD, few promote MHS utilization for MDD. Although outside of the scope of MDD, *Brandon the Bipolar Bear* by Tracy Anglada is a good example of a book that addresses the possibility of seeking care for mental illness. The book, targeted to children ages 5-12, defines bipolar disorder and addresses genetic causes in a simple way in order to provide a biomedical framework under which MHS utilization is addresses.

Although the aforementioned books may have Spanish language translations, none were written for a bilingual or Latin@ target audience. Thus, the books do not demonstrate a culturally competent approach, as they do no address the explanatory models many Latin@ hold about MDD. This contributes to a significant gap in current children’s literature. It is important for children's literature to be culturally competent or else the presented information will not resonate with the target audience.
WHY WRITE A CHILDREN’S BOOK

**Topic Justification**

This project encompasses three of the things I am passionate about: Spanish language and Latin@ culture, public health and medicine, and biochemistry. Throughout my studies at Oregon State University, these subjects are what I have spent most of my academic focus on. Therefore, this interdisciplinary project is a perfect intersection of my knowledge base. My passion for health promotion has inspired me to create a project that attempts to reduce internal barriers to MHS utilization and serves as a tool to empower individuals with MDD to seek care. I specifically choose to focus on MDD because of its high prevalence among Latin@s in the United States.

**Significance**

MHS utilization for MDD is low among Latin@s even though Latin@s experience a higher prevalence of MDD than non-Latin@ whites (Cook et al., 2014; Pratt & Brody, 2008). Rates of MHS utilization are low among U.S Latin@s in part due to internal barriers, which include stigma, familism, non-biomedical explanatory models, spirituality, and fatalism.

This project will provide a springboard for children and their families to approach the tabooed subject of MDD in order to overcome internal barriers to MHS. A children’s book format has the potential to stimulate conversation among family members and friends reading the book to children. Children’s literature is a great way to spread information because it is accessible to a wide range of readers across age groups,
educational levels, and cultural backgrounds. Children's literature can also be a very entertaining and interactive way to learn (Buccieri & Economy, 2005; Dils, 1998; Shepard, 2000). By addressing MDD during a child's formative years, this book has the potential to alter future perceptions surrounding MDD. It also has the potential to provide alternatives to explanatory models held by adult readers.

There is currently a lack of children’s literature that addresses the biomedical etiology of MDD and discusses the availability of MHS for MDD. This is especially true of the children’s literature available to U.S. Latin@s and accessible in a culturally competent manner. Thus, this project will fill a gap within children's literature and serve to reduce the health disparities facing U.S. Latin@s at the level of internal barriers to MHS utilization.
TARGET AUDIENCE

The target audience for this book is children ages 7-12 and the adults who read with them. Dils (1998) emphasizes the importance of writing children’s books that appeal to both children and adults, as adults typically purchase or acquire the books. Thus, children’s books must be basic enough to be understood by children, but also address topics that appeal to adults. This book was carefully written to explain important ideas about MDD in simple terms comprehensible for children. A secondary benefit of writing for a younger audience is that the material presented is more accessible to adults who may have limited literacy skills.

This children’s book was written to be bilingual. This will allow both Latin@s and non-Latin@s to access the book regardless of preferred language. Immigrants who come to the U.S. may feel pressured to acculturate linguistically by learning English rather than using their native language (Lee, 2002). By writing a bilingual book, I hope to avoid pressuring people to speak or read only English. I also hope to make the book accessible to those who choose not to learn English or facing barriers to learning English. Additionally, the bilingual nature of this book may aid language learning without engendering confusion through a hybrid or blended language format (Schon, 2004).

For those who identify as U.S. Americans, this book may also challenge the notion that English is the only language that U.S. Americans should learn or use. Because there is significant Latin@ population in the United States, Latin@ culture and language is becoming more integrated into mainstream U.S. culture. Both children and adults
should have the opportunity to be exposed to other languages and cultures. This book provides a medium for this type of exposure.

The settings and situational interactions in this book are intentionally general in some areas so that they might apply equally to those who identify with mainstream U.S. culture or Latin@ culture. This is important because there are increasing numbers of bicultural and multicultural families in the United States. Although this book addresses cultural aspects and explanatory models unique to Latin@s, these are explained in a way that non-Latin@s can comprehend. Another goal is to address MDD and promote MHS utilization in a manner comprehensible to the audience regardless of language and cultural background in order to emphasize that MDD is universal, rather than a condition uniquely affecting Latin@s.

At the same time, this book uses culturally normative examples to represent authentic Latin@s literature and aims to present MDD in a culturally competent manner. As noted above, culture influences explanatory models of health, which in turn influences compliance to treatment (Kleinmann, 1987; Dressler, 1980). Thus, cultural competency is essential for healthcare promotion among acculturating, bicultural, or multicultural groups because it allows the message to resonate with the audience.

This book attempts to provide a biomedical model for MDD without condemning existing explanatory models. It establishes normative views toward mental illness through a biomedical perspective in order to reduce stigma around MDD and promote MHS utilization. Thus, this book is not only meant as an education tool for individuals affected by MDD, but the book also serves to normalize the experience and treatment of mental illness on a broader scale.
CHARACTER DEVELOPMENT

The main character in this children’s book is Ana. She is a very inquisitive child who wants to understand how the world works and why. Throughout the story, Ana guides the direction of the conversations she has with her mother, aunt, and uncle. The story was written in this manner because research suggests that children want to read about protagonists who take initiative and are problem solvers (Buccieri & Economy, 2005; Dils, 1998; Shepard, 2000).

Ana learns about MDD directly from her mother and schoolteacher, and indirectly from her mother's psychologist. Her mother is a trusted source of information, as she has experienced depression and is effectively utilizing MHS. Additional authority is imparted from the psychologist, Dr. Hidalgo; albeit absent in direct conversation, he is a logical source to support for the biomedical model of MDD presented in this story. Mrs. Albrich, who is an image of authority for children in her role as a schoolteacher, is a respectable character to reduce stigma surrounding MDD. She is represented as a non-Latin@ white because studies show that non-Latin@ whites are more likely to embrace biomedical models for MDD and deny stigma associated with the condition than Latin@s (Alvidrez, 1999; Nadeem et al., 2007). Thus, she is an authentic and logical character to deconstruct the embarrassment associated with MDD.

Father Ignacio, as a Catholic priest, is also an appropriate authority to invoke in order to provide an alternative to spiritual fatalism (see “Spirituality and Fatalism” above). Because the majority of U.S. Latin@s identify as Christians, his advice to pray but also utilize MHS resonates with the target audience without condemning spirituality.
Ana’s aunt and grandmother are highlighted as supportive character for Ana’s mother, who discusses her emotions openly with them. Familism is often important in Latin@ culture, so it is authentic for Ana's mother to confide in her family members (Sabogal et al., 1987).

Ana’s Uncle Miguel is portrayed as less acculturated than Ana and her mother through the way he discusses his homesickness for Mexico and refers to MDD as nervios rather than depression. His lower degree of acculturation is also paralleled in the story’s allusion to his inability to acquire health insurance and communicate effectively with U.S. physicians. His interactions with his family and community are also reflective of extended family and community support networks among Latin@s.

Familial and social support are often very important factors in Latin@ culture. Thus, it fitting for Ana to learn about MDD from her mother, and it is authentic for Uncle Miguel to receive information about MDD from Latin@ family members who have had personal experiences with MDD (Sabogal et al., 1987; Gill, 2009). Similarly, many researchers recommend including extended family members in children's literature because of the importance of familism in sociocultural development (Faraz, 2010).
CHILDREN’S BOOK CONTENT

Introduction

*Ana’s Family Feels Happy Again,* or *La familia de Ana está feliz de nuevo,* is a story about a young Latina girl named Ana who learns about MDD. Through a series of experiences and many poignant questions, she learns that depression is a medical condition that individuals need not be ashamed of experiencing. She also grows to understand that there are resources to help those with depression. As the story continues, Ana interacts with her uncle to encourage him to consider what he views as *nervios,* due to difficult circumstances, as MDD, due to a medical condition.

Before School

The story begins when Ana’s mother asks her if she is ready for school. They must leave early enough for her mother to arrive at the psychologist’s office in time for an appointment with Dr. Hidalgo. Because she does not think her mother appears to be ill, Ana is confusion as to why her mother must see a doctor. In fact, Ana states that her mother seems to be in better health than she was previously. It is at this point that the story reveals the fact that Ana’s mother has MDD. When Ana’s mother explains that she has been feeling better because she sees a psychologist, Ana begins to learn that depression is more than just feeling sad. The purpose of this interaction is to describe MDD in an accessible way, congruent to DSM diagnostic criteria (see “Diagnosing Major Depressive Disorder” above). By this same interaction, Ana learns that depression is not the fault to any person or situation, but is a medical condition for which it is
possible to receive treatment. Indeed, this section alludes to different resources available for individuals with MDD, including primary care doctors, psychologists, and social support networks. The benefit and availability of these resources are developed to greater degrees as the story unfolds.

**Teased at School**

When Ana is dropped off at school, her classmates tease her because her mother goes to a psychologist. The purpose of this interaction is to address the reality that mental illness is stigmatized and that many individuals believe MHS are only utilized by “crazy” or “unstable” individuals (see “Stigma” above) (Hamre et al., 1994). The story then proposes to eliminate the stigma associated with MHS utilization through the interactions the schoolchildren have with their teacher, Mrs. Albrich. In her authoritative role as a schoolteacher, Mrs. Albrich explains that depression is not funny or shameful, but a medical condition. She compares going to a psychologist for MHS with going to a primary care physician to treat a broken arm or stomach pain in order to highlight the biomedical aspect of MDD and thereby normalize the condition.

This section also introduces the concept of hierarchy of care for MDD. Mrs. Albrich explains that primary care providers are often the first line of care for individuals with MDD. If needed, the individual may be referred to a specialist, often a clinical psychologist, for further assessment or therapy. The intent of this interaction is to suggest that there are more accessible alternatives to specialized mental healthcare. This section also reaffirms that it is beneficial for individuals with depression to seek MHS.
After School

The discussion about stigma and shame is further developed when Ana’s mother picks her up after school. Her mother states that she is not ashamed of having depression or receiving care for it because she knows that MDD is a medical condition. As Ana grows to understand the biomedical nature of MDD, in this section she expresses fear that she may have caught the “sadness” illness from her mother, since she was sad and began to cry when her classmates made fun of her. Her mother reassures her that it is normal to be sad and tells her that sadness should only be addressed with MHS when it consistently interferes with daily function *(DSM-IV-TR)*. She also explains that depression is not contagious, but may be hereditary (see “Biological Influences: The Diathesis-Stress Model” above) *(Belmaker & Agam, 2008)*. Ana’s mother states that MDD has a genetic element, explaining that although this might predispose Ana to the condition, she should not be ashamed or scared to talk about any feelings of sadness should she develop MDD in the future.

The discussion about heredity opens the door to a discussion about the causes of depression in a biomedical framework. Ana learns that depression is caused by inappropriate levels of chemical signals in the brain *(Lapin & Oxenkrug, 1969; Nutt, 2008)*. Chemicals are introduced as what Ana’s uncle sprays on the fields at work to kill bugs. This normative example makes chemicals more accessible through an authentic and tangible example. A simple biochemistry definition of chemicals is also given when Ana’s mother describes chemicals as small, ubiquitous entities that make life function. She also explains that chemicals help the body work correctly, with inappropriate levels potentially engendering dysfunction. Ana’s mom states that there are chemicals in the
brains called serotonin and norepinephrine that send messages to different parts of the brain to make memories and thoughts. She also explains that a shortage of these chemicals may correspond to depression (Nutt, 2008). To explain the role of chemical balances in disease pathology in a more accessible way, the story makes a comparison to the role of insulin in diabetes. Diabetes is an illness that affects many Latin@s in the United States; its tangibility and cultural normativity makes it more easily understood by the target audience.

Introducing the role of chemicals and creating a parallel to diabetes opens the door to a discussion about pharmacological treatment of MDD. Ana learns that there are medications that reduce depressive symptoms (see “Pharmacological Therapy” above) (Mayo Clinic, 2010). However, Ana’s mother states that although she takes medicine to help with her depression, she engages in psychological therapy so that she will ultimately feel better without medication. This not only emphasizes that pharmacological therapies are not the gold standard of care, but also suggests that psychological counseling and social support are effective alternatives to medication that may also prevent relapse of recurrent MDD (see “Cognitive Behavioral Therapy” above) (Fava et al., 1998; Hollon et al., 1991). The various types of MHS available are further developed when Ana and her mother talk with Uncle Miguel.

**Visiting Uncle Miguel**

When Ana and her mother visit Ana’s aunt and uncle, they learns that Uncle Miguel has been depressed for quite some time and his sadness has been interfering with his daily responsibilities. In this section, Ana becomes the expert in regards to depression
and suggests that her uncle seek care for MDD. This section invokes the diathesis-stress model (see “Biological Influences: The Diathesis-Stress Model” above) (Cabassa et al., 2007). The diathesis element is present in the fact that, as Ana’s maternal uncle, Uncle Miguel carries the same genetically predisposed to MDD that Ana's mother (his sister) does. The stress element is manifest in the fact that he is facing acculturative stress, in the form of role conflict (see “Status Inconsistency and Role Conflict” above) (Rubel, 1964). This is also reflective of Cabasa et al. (2006) demonstrating that Latino men believe not filling their social roles as the providers of their families to be a trigger for the development of depressive feelings.

When Ana suggests that Uncle Miguel utilize MHS to alleviate his sadness, he emphatically states that although he might be homesick for Mexico or have a case of nervios, he does not have depression. Uncle Miguel also argues that he does not need to seek care because he can cope with his feelings on his own. This dialog reflects the idea that men believe depression is a sign of weakness and are thereby less likely to utilize MHS than women. As described above, this gender imbalance is likely due to the effect of socialization on reporting MDD symptomology (Romans et al., 2007).

This section also proposes to promote MHS utilization by addressing existing explanatory models of MDD among Latin@s while also providing a biomedical model. The story first emphasizes that MDD is not a sign of weakness or a source of shame, but a medical condition with a biomedical cause (see “Stigma” and “A Biomedical Perspective of Major Depressive Disorder” above). It then goes on to explain that many people think that depression is just nerves due to difficult experiences. The use of the term nervios by Latin@s has further ingrained this perception because the term has
conceptually shifted the apparent cause of MDD away from a biomedical model to a model embracing interpersonal or situational experiences as cause for depression. (Cabassa et al., 2007) The goal of this portion of the story is to establish that although stressful events may precipitate depression under the diathesis-stress model of MDD, the cause is also biological. Reframing MDD through an alternative linguistic model reaffirms the biomedical element of MDD to encourage MHS utilization without condemning existing models for depression outright. Indeed, this project attempts to reconcile existing explanatory models with the biomedical model of MDD to provide avenues of culturally competent MHS utilization promotion.

In the same scene, Ana’s mother describes her experience seeking MHS to demonstrate that doing so is not a weakness or source of shame. She states that that at first she did not want to talk about her feelings, especially with anyone outside of the family. This point is included to reflect that familism is often strongly present in Latin@ culture and may influence MHS utilization (Alvidrez, 1999; Leaf et al., 1986). Ana’s mother then goes on to explain that the Catholic priest, Father Ignacio, encouraged her to utilize MHS. This point addresses any religious fatalism adhered to by religious U.S. Latin@s. This portion of the story invokes a credible source, a religious leader, to challenge the belief that depression is a punishment for spiritual transgression. The story attempts to promote MHS utilization, without disparaging faith or Christian belief, by presenting MHS utilization as a viable option for fatalistic individuals with MDD. Indeed, care seeking behavior and faith are reconciled when Father Ignacio suggests utilizing MHS in addition to upholding faith in God.
Ana's interaction with her uncle also alludes to the external institutional barriers to MHS utilization facing Latin@s. Uncle Miguel states that even if he wanted to talk to a doctor in order to receive pharmacological treatment for MDD, the U.S. doctors would not understand him nor does he have the “right” paperwork to obtain health insurance. The former statement alludes to the fact that Uncle Miguel is more proficient in Spanish than English, identifies more with his Latino roots. Pragmatically, this contributes to poor the healthcare utilization because of the lack of trust and communication between Latin@s and physicians who are not culturally competent (Hayes, 2014). The latter statement addresses the spectrum of acculturation, socioeconomic status, and legal status characterizing Latin@ families in the United States; while Ana and her mother are acculturated and middle class with good access to healthcare, Uncle Miguel suggests that he may be undocumented and unable to qualify for health insurance. Even with the Affordable Care Act, many individuals in the United State fall through the healthcare system. This is especially true for undocumented Latin@s who often cannot establish care with a general practitioner, let alone a specialist.

Without attempting to minimize these issues, the story provides alternatives to standard care models. First, Ana’s mother suggests that Uncle Miguel does not need specialized care, but rather could visit a free or sliding-scale community health center to receive a clinical assessment. Indeed, numerous studies show that community-based primary care management models provide evidence-based and cost-effective treatment for MDD (Kilbourne et al., 2004; Glied et al., 2010; Parker, 2010; Katon et al., 1999). Ana’s mother alludes to a chronic-care clinic because in recent years, community-based primary care management this has manifested in an integrated and guided care model
(Katon et al., 2010; Parker, 2010). This section also revisits the idea that not everyone needs pharmacological treatment for MDD and reasserts that therapy and social support are good alternatives (George et al., 1989). Although Uncle Miguel is hesitant to accept that he may have MDD, the process of destigmatizing the condition leads him to be more receptive to the possibility of utilizing MHS if he continues feeling the same way.

**At the Birthday Party**

A month after Ana encourages her uncle to utilize MHS, her entire family has gathered at the park for her brother’s birthday party. When Ana sees Uncle Miguel step into view on the other side of the park, she runs into his arms; she is excited that he is there because he has not come to a family event in a long time. This is an early indication that his demeanor has changed. Indeed, as they begin to talk, Uncle Miguel states that he visited a community clinic to receive a psychological assessment. Although he is not seeing a psychologist for therapy, he does speak with Father Ignacio twice a week. Uncle Miguel states that he has begun to feel better with Father Ignacio’s support, calling him a good counselor. The purpose of this statement is to highlight that family and community support may be an effective alternative to CBT for those with limited access to clinical care. This once again emphasizes that there are alternatives to pharmacological therapy and psychological counseling (see “Treatments for Major Depressive Disorder” above).

Uncle Miguel also appreciates the fact that Ana recommended that he seek help. He suggests that she consider becoming a physician when she grows up so that she may continue explaining depression and promoting MHS utilization among individuals with MDD. This addresses the reality that U.S. Latin@s are an underrepresented minority in
healthcare careers, which engenders additional external barriers to U.S. Latin@ MHS utilization at the level of communication and cultural competence. The story proposes to encourage the young target audience to pursue careers in medicine.

The story concludes with Uncle Miguel expressing his thankfulness to have the support of his community. With their support, he feels better and enjoys doing the things he once used to, like playing on the swings with Ana. This conclusion emphasizes the importance of social support in treating MDD and highlights the availability of resources for individuals with MDD in order to promote MHS utilization.
I illustrated this children’s book after completing the story line in order to better coordinate the images with the desired message. The illustrations were made as pencil sketches and scanned into Photoshop to be enhanced and colored digitally.

The images were specifically designed to correspond to culturally normative experiences within a generalized context in order to reach a broad audience. Vibrant colors and bold images were selected to capture the attention of a young audience. Stylistically and symbolically, dark colors were used to reflect the negative affect associated with MDD. For example, when Ana's mother alludes to her experience with depression and when the story first introduced to Ana’s uncle, the images employ dark colors. Alternatively, after utilizing MHS, both Ana's mother and uncle are clad in bright blues, which often represent happiness in Latin@ culture.

The text is coordinated with and overlaid upon the illustrations in a way that carries the conversation-based story line forward. This is specifically achieved with panel illustrations and forward-moving images.
CONCLUSIONS

Focus Group

Once the children’s book has undergone all of the edits and corrections from my committee, I hope to present it to a focus group of Latin@ children and in order to observe their reactions to the material presents. This will help me to finalize the book and make sure that it is appropriate for the target audience. I want to confirm that it feels authentic, not strained or offensive in any unintended way, and that the language is appropriate and familiar.

The focus group for these evaluations will be organized in closely contact with the bilingual education programs in Corvallis, Oregon. As a first step, I will read the book to children in the SMART reading program at both Lincoln and Garfield elementary schools. Next, I will with the Parent Teacher Association at Garfield elementary to assess parental perceptions of the book. Last, I will observe interactions between parent readers and child listeners to determine what types of discussions the book elicits so that I may address any gaps in information provided. The latter will also allow me to structure a discussion and frequently-asked –questions sections to append to the children’s book as a resource for adults reading to children.

Publishing

Four works about writing and publishing children’s books—You Can Write Children’s Books, by Tracey Dils; Writing Children’s Books For Dummies, by Lisa Buccieri and Peter Economy; The Business of Writing for Children, by Aaron Shepard; and 2011 Children’s Writer’s And Illustrator’s Market, by Alice Pope—each provide
information about the most effective ways to submit a manuscript to publishing companies. These authors explicitly state that it is imperative to follow the publisher’s submissions instructions and manuscript formatting criteria precisely. The authors emphasized that the manuscript ought to stand alone, devoid of accompanying illustrations, so that the publisher can produce images in his or her own mind. However, if illustrations are include alongside the manuscript, only a select few ought to be submitted as an indicative sample.

After my work with focus groups at Garfield and Lincoln Elementary to finalize the book’s content and additional resource material, I intend to submit my English-Spanish manuscript and accompanying sample illustrations broadly to a number of publishing companies that do not require exclusive submissions. Among publishing houses solicited during my broad submission, I intend to submit my manuscript to Piñata Books. Piñata Books specializes in English-Spanish bilingual children’s books. This publishing house focuses on U.S. Latin@ cultural issues and themes, seeking to portray themes, characters, and customs in culturally authentic and realistic ways. I hope that by following the advice of published authors and editors, I will increase my chance of being published.

**Dissemination**

I intend to disseminate this book regardless of professional publication so that it may make an impact in the community. I will self-publish a handful of books with *Create Space* and distribute free copies at local family clinics, St. Mary’s Church, Head Start, the César Chávez Cultural Center on the Oregon State University campus, and Community Outreach, Inc.
I will concurrently pursue other avenues of dissemination, including coloring books and film. The bilingual manuscript and accompanying illustrations will be submitted to IRIS Educational Media, an organization based in Eugene, Oregon that specializes in producing bilingual educational material for both those who identify as Latin@s and non-Latin@s. Stylistically, IRIS Educational Media blends video recordings with illustrations; thus, my book may be adapted to their methods and mission to provide educational material to the general public.

Summary

The goal of this project was to write and illustrate a children’s book that reduces internal barriers to MHS utilization among U.S. Latin@s with MDD. There is a need for culturally competent MHS promotion among Latin@s, an underserved and rapidly growing population in the United States. Children’s literature is an accessible medium to transmit information on a personal level. It can also be a fun and interactive way to learn, thus serving as a springboard for open discussion about MDD. In this way, it can influence children’s views of MDD during the formative years of social and mental development to curtail stigma and redirect socioculturally ingrained perceptions about MDD etiology. By deconstructing feelings of embarrassment around MDD, providing a biomedical explanatory model, and normalizing care-seeking behavior, this book aims to facilitate open discussion about mental illness and empower more U.S. Latin@s experiencing major depressive disorder to utilize appropriate mental health services.


APPENDIX
Appendix: La familia de Ana está feliz de nuevo/Ana’s Family is Happy Again
“Are you ready for school, Ana?” asked her mom.
“Remember, we need to leave the house early so that I can drop you off at school before my appointment with Dr. Hidalgo.”

“Again, Mom? You go to the doctor a lot. Are you sick? You don’t look sick. You’re not coughing or sneezing. And you look better than before. You’re not in bed anymore and have more energy to play with me. You smile more and look happy. I don’t understand why you are going to the doctor, Mom.”

—Tienes razón, Ana, no estoy tosiendo ni estornudando, y estoy feliz...

“You’re right, Ana, I’m not coughing or sneezing, and I am happier...
—Eso es porque hablo con el Doctor Hidalgo. Es un psicólogo, un doctor de cerebro. Es muy amable, me escucha. Me ayuda a aliviar la tristeza cuando hablo con él sobre mis emociones.

“That’s because I talk with Dr. Hidalgo. He is a psychologist, a brain doctor. He is very nice and listens to me. He helps me feel less sad when I talk to him about my feelings.”
—Mamá, estoy triste de vez en cuando también, por ejemplo cuando mi hermanito Luis rompe mis juguetes. Pero solamente hablo contigo cuando me pongo triste. ¿Por qué vas al doctor? Los doctores ayudan a la gente que está enferma. No estás enferma, solamente triste, ¿verdad?

“Mom, I’m sad too sometimes, like when my brother Luis breaks my toys. But I just talk to you when I’m sad. Why do you go to a doctor? Doctors are for sick people. You’re not sick, just sad, right?”
—Me anima hablar con tu abuela o tu tía —contestó su mamá—. Confío en ellas y me gusta hablar con ellas porque el apoyo de la familia me ayuda a evitar de enfristararme más. Pero también vialo al doctor porque tengo algo que se llama depresión, y ésta es más que tristeza...

"I have talked to your grandma or aunt when I’m sad," replied her mom. "I trust them and like talking to them because family support helps keep me from getting sadder. But I also see the doctor because I have something called depression, and that’s more than just being sad..."

—Tienes depresión cuando la tristeza te hace difícil divertirte con tus amigos y hacer las cosas que haces cada día. ¿Recuerdas cómo siempre estaba triste el año pasado? No disfrutaba de las cosas que me gustaban antes. No quería pasar tiempo con familia ni amigos, y no tenía ganas de hacer nada. Me quedaba sin energía, y solo quería meterme en la cama todo el día. Tenía una actitud muy negativa por un par de semanas seguidas y pensaba que jamás estaría feliz. E¡sta es depresión.

"Depression is when sadness makes it hard to have fun with your friends and do the things you do every day. Do you remember how I was sad a lot last year? I stopped liking the things I used to enjoy. I didn’t want to spend time with family and friends or do anything. I didn’t have energy and just wanted to stay in bed all day. I felt really bad about myself for a couple weeks in a row and thought I would never be happy again. That’s depression."
—Mamá, ¿por qué tienes depresión? —preguntó Ana mientras salían de la casa—. ¿Estás triste por culpa mía, o por culpa de Papá o Luis?

“Mom, why do you have depression?” asked Ana as they walked out the door. “Did daddy or Luis or I do something to make you sad?”

—No, mi amor, no tienes la culpa —respondió su mama—. Nadie tiene la culpa. Algunas veces, cuando algo me molesta, incluso cosas pequeñas, empiezo a enfrascarme aún más con mi problema sin razón. Y después me quedo triste. Es una enfermedad. Y por eso visité a nuestro doctor general. Él me aconsejó que visitara al psicólogo con quien trabaja para hablar más de la depresión.

“No, my love, it’s not your fault,” her mom replied. “It’s nobody’s fault. Sometimes when I am upset, even over little things, I find myself getting sadder for no reason. And then I stay sad. It’s an illness. And that’s why I visited our family doctor. She recommended I visit the psychologist she works with to talk more about my depression.”
—Vámonos, para que no lleguemos tarde.

“Come, let’s go so we aren’t late.”
"Bye Mom, good luck at the psychologist’s!” shouted Ana as her mom dropped her off at school.

---Hasta luego Mamá, ique te vaya bien con el psicólogo! ---exclamó Ana cuando su mamá la dejó en la escuela.
—¿Tu mamá visita a un psicólogo? —preguntó otra estudiante. Todas se rieron y dijeron cosas feas como—: Tu mamá debe estar loca —y— ¿Tú estás loca también?

“Your mom goes to a psychologist?” asked a classmate. Everyone laughed and said mean things like, “She must be crazy,” and, “Are you crazy too?”
—N-nooo, no está loca —balbuceó Ana, y empezó a llorar—, solamente está triste. Tiene depresión.

“N-nooo, she’s not crazy,” stammered Ana as she began to cry, “She’s just sad. She has depression.”

—Chicas —interrumpió la Señora Albrich—. Basta. Depresión no indica que estás loco, significa que estás triste. La depresión es una condición médica. No es algo cómico ni vergonzoso. ¿Se burlarían de ella si se le rompiera el brazo o tuviera dolor del estómago? ¡No!

“Now girls,” interrupted Mrs. Albrich. “Enough. Depression does not mean you are crazy, it means you are sad. Depression is a medical condition. It isn’t funny or shameful. Would you make fun of her for a broken arm or a problem in her stomach? No!”

—Todos nos ponemos tristes —continuó ella—. Pero algunas veces la tristeza es demasiado grande y el doctor te podría enviar a un psicólogo para hablar del problema. Es valiente pedir ayuda, no es algo para avergonzarte.

“We all get sad,” she continued. “But sometimes the sadness gets too big and the doctor might send you to a psychologist to talk about what’s wrong. It’s brave to ask for help, not something to be ashamed about.”
Apenadas, las chicas le pidieron perdón: —Sentimos que nos hayamos burlado de ti, Ana. No sabíamos. Ojalá que tu mamá se sienta mejor.

Embarrassed, the girls apologized. “Sorry for making fun of you, Ana. We didn’t know. We hope your mom feels better soon.”
Cuando la mamá de Ana llegó a la escuela al fin del día, ella preguntó: ¿Cómo te fue en la escuela, Ana?

—Bien, pero algunas chicas se burlaron de mí porque visitas a un psicólogo. La Sra. Albrich dijo que es bueno ir al doctor, y que no es algo vergonzoso...

“¡It was okay, but some girls made fun of me because you go to a psychologist. Mrs. Albrich said that going to the doctor is a good thing, and nothing to be ashamed of...”

Pero me puse triste y empezé a llorar. Es que ahora estoy preocupada que también tenga depresión. ¡Posiblemente me contagiaste la tristeza!

“But I was sad and started crying. And now I’m worried that I might have depression, too. Maybe I caught the sadness from you!”
— Lo siento, Ana. La Sra. Albrich tiene razón. Es bueno que visites al doctor, y no tengo vergüenza de estar con depresión. Es una condición médica como tener gripe. Pero no se pasa como la gripe. No es contagioso, mi amor. Sólo porque lloras cuando estás triste no significa que tengas depresión. Es normal. Si no lloras, serías un robot. No quise asustarte cuando te dije que tengo depresión, sino que quería que entierdas que existe porque la doctora dijo que puede ocurrir en la familia, en la misma manera que tu abuelo, tío, tú, y yo tenemos los mismos ojos. También quiero que sepas de la depresión de modo que si alguna vez te sientes triste como me sentía yo, no te sientas mal ni tengas miedo por sentirte así. No hay que avergonzarte de la depresión.

“I’m sorry that happened, Ana. Mrs. Albrich is right. It’s a good thing to go to the doctor, and I’m not ashamed of having depression. It’s a medical problem just like having the flu. But you don’t catch it the same way you catch the flu. It’s not contagious, my love. And just because you cry when you’re sad doesn’t mean you have depression. That’s normal. Otherwise you would be a robot! I didn’t want to scare you when I told you I have depression, but I did want you to know about it because the doctor said that it can run in the family, like how grandma, uncle, you, and I have the same eyes. I also want you to know about depression so that if you ever do feel sad like I did, you don’t feel bad about yourself or scared that you are feeling that way. Don’t be ashamed of depression.”
—Pero si no contraes depresión, ¿cómo te enfermas de eso? ¿Cuál es la causa?
—preguntó Ana.

“But if you don’t catch depression, how do you get it? What causes it?”
asked Ana.

—Tengo depresión porque me faltan ciertos químicos en el cerebro. ¿Entiendes lo que son químicos?

“I have depression because I don’t have enough of certain chemicals in my brain. Do you know what chemicals are?”
—Mi tío pone químicos en el campo en que trabaja para matar los bichos, ¿verdad?
—preguntó Ana.

Chemicals are what Uncle sprays on the fields at work to kill the bugs, right? asked Ana.

—Sí, mi amor. Eso son químicos. Los químicos son muy pequeños. Aunque no podemos verlos, están por todas partes y tienen muchísimos trabajos diferentes. También están dentro de nosotros...

“Yes, my love. Those are chemicals. Chemicals are very small. Even though you can’t see them, they are everywhere and have all kinds of jobs. They are even inside of us...
—Pero, cuando no tienes los niveles apropiados de químicos en tu cuerpo —continuó su mamá— puedes tener una enfermedad. Por ejemplo, Abuela Elena tiene diabetes porque no tiene una cantidad suficiente del químico insulina, y toma más insulina para sentirse mejor...

“But, when you don’t have the correct amount of chemical in your body,” continued her mom, “you can have an illness. For example, Grandma Elena has diabetes because she doesn’t have enough of a chemical called insulin, and she takes more insulin to feel better...

—Existen químicos en el cerebro que se llaman serotonina y norepinefrina que mandan mensajes a través del cerebro, como una llamada telefónica, y funcionan para crear memorias y ayudarte a pensar y sentir cosas buenas. Si no hay suficientes químicos para hacer sus trabajos, es posible que te enfermes de depresión.

“There are also chemicals in our brains called serotonin and norepinephrine that send messages to different parts of the brain, like phone calls, that help make memories and help you think and make happy thoughts. If there aren’t enough chemicals to do their job, then you might get depression.”
—¿Puedes recibir más químicos para el cerebro igual que Abuela recibe insulina? —preguntó Ana—. No quiero que estés triste simplemente porque los químicos no están trabajando correctamente!

Can you get more chemicals for your head, like Grandma gets insulin? asked Ana. “I don’t want you to be sad because the chemicals aren’t doing their jobs!”

—Gracias, mi amor, no quiero estar triste tampoco. Yo sé que para ti la depresión ha sido difícil. Por eso empecé a visitar al Doctor Hidalgo. Me escucha y me apoya, y también ayuda a asegurar que los químicos en el cerebro funcionen mejor con la medicina que me dio nuestra doctora general.

“Thank you my love, I don’t want to be sad, either. I know that my depression has been hard for you, too. That’s why I started going to Dr. Hidalgo. He listens to me and supports me, and he also helps make sure the chemicals in my brain work better with the medicine our family doctor gave me.”
—¿Existe una medicina para la depresión? Entonces, realmente es una enfermedad, ¿no?

“So there is medicine for depression? It really is an illness then, isn’t it?”

—Sí, lo es. Y la pueden tratar con medicina como cualquier otra enfermedad. Pero cada persona no necesitan medicina. El Dr. Hidalgo me está ayudando a estar mejor eventualmente sin medicina...

“Yes it is. And it can be treated with medicine just like any other illness. But not everyone needs medicine. Dr. Hidalgo is helping me to feel better eventually without having to take medicine...

—Algunas veces, sólo hablar con alguien, como un consejero o amigo, puede ayudar. Me gusta hablar con tu Tía Sofía...

“Sometimes it helps just to talk with someone, like a counselor or friend. I like to talk with your Aunt Sofia...
Vamos a visitarla ahora.

"Let's go visit her now."
—Hola Tía Sofía. ¡Mucho gusto en verte! ¿Tío Miguel está aquí?

“Hi Aunt Sofia. It’s good to see you! Is Uncle Miguel here?”

—Está preparándose para ir al trabajo —respondió Tía Sofía—. Intenta trabajar extra porque ya ha pasado muchos días deprimido sin salir de la casa. No quiere ir al trabajo. No puede levantarse en la mañana aunque sabe que necesitamos que mantenga el trabajo. Pero eso sólo le da más estrés y más tristeza.

“He is getting ready to go to work,” responded Aunt Sofia. “He is trying to work extra because he has missed so much work already, moping around the house. He doesn’t want to go to work. He can’t get out of bed in the morning even though he knows we need him to keep his job. But that just gives him more stress and makes him sadder.”

—Tía —dijo Ana—, creo que tiene depresión, como Mamá.

"Auntie," said Ana, "I think he has depression, like Mama."
¿Quién tiene depresión, Ana?
—preguntó su tío cuando entró en el salón.

"Who has depression, Ana?" asked her uncle when he entered the room.
—Hola Tío Miguel —dijo Ana—. Tío me dice que has estado triste y estresado. Pero creo que tienes depresión, como Mamá. Tienes los mismos ojos que ella, por tanto podrías tener la depresión que el doctor dice podría estar en la familia. Mamá va a un doctor y se siente mejor, por lo tanto deberías ir también.

“Hi Uncle Miguel,” said Ana. “Auntie tells me you have been sad and stressed. But I think you have depression, like Mom. You have the same eyes as her, so you might have the depression that the doctor says might run in the family. Mom goes to a doctor and feels better, so you should, too.”

—Ana, no tengo depresión —dijo Tío Miguel—. De vez en cuando echo de menos México, o es posible que sólo sea nervios. Pero no necesito un doctor por un poco de añoranza. Puedo hacer frente a mis sentimientos solo.

“Ana, I’m not depressed,” Uncle Miguel stated. “Sometimes I miss Mexico, or it might be a bit of nerves. But I don’t need a doctor for a little homesickness; I can deal with my feelings alone.”

—Miguel —dijo la mamá de Ana—, Ana tiene razón, lo que estás experimentando posiblemente es más que tristeza. Muchas personas creen que la depresión solamente es un caso de nervios, por experiencias difíciles. Pero, yo sé que te has sentido así mucho tiempo y me parece que nada lo ha mejorado, ni siquiera tu visita a México al mes pasado. No se vale evitar este tema...

“Miguel,” said Ana’s mom, “Ana is right, this might be more than just sadness. A lot of people think that depression is just nerves because of difficult experiences. But I know you have felt this way a long time and it seems like nothing makes it better, not even when you visited Mexico last month. Don’t avoid talking about it...
—Al principio tampoco admitía que tengo depresión, especialmente a alguien fuera de la familia —continuó la mamá de Ana—. Pensé que me juzgarían por estar triste y sin esperanza. Pero un día después de la misa, se lo confesé al Padre Ignacio. Me aseguró que no debía tener vergüenza de estar con depresión. Me sugirió que siguiera orando, y también que visitara al doctor porque el Señor proviene doctores con maneras de ayudar a la gente enferma como yo. La depresión es una condición médica.

“At first I didn’t want to tell anyone, especially anyone outside of the family that I had depression,” continued Ana’s mom. “I thought they would judge me for feeling sad and hopeless all the time. But one day I talked to Father Ignacio after mass. He told me that I shouldn’t be ashamed of having depression. He said to pray but to also visit a doctor because God provides doctors with ways to help sick people like me. Depression is a medical condition.”

—Sí —añadió Ana—, y eso significa que puedes ir al doctor para hacer algo sobre tu depresión en lugar de quedarte estancado en tu tristeza para siempre.

“Yeah,” added Ana, “and that means that you can go to a doctor to do something about your depression instead of being stuck sad forever.”
—Pues, aun si quisiera visitar un doctor para tomar medicina, los doctores estadounidenses no me entenderían. De cualquier modo, no tenemos los papeles para que podamos conseguir seguro médico. Así no puedo visitar un psiquiatra o psicólogo, como haces tú —dijo el Tío Miguel.

“Well, even if I did want to talk to a doctor to get medicine, the U.S. doctors wouldn’t understand me. Plus you know we don’t have the right paperwork to have insurance. So I can’t visit a psychiatrist or psychologist, like you do,” said Uncle Miguel.

—No necesitas un especialista —respondió la mamá de Ana—. Los doctores generales son tan buenos en ayudar a la gente con depresión. Puedes ir al centro comunitario de salud o una de las casas de cuidado crónico para visitar a un doctor o enfermera y hablar de lo que te podría ayudar. Además, no todos necesitan medicina para la depresión. Simplemente hablar puede ayudar. Puedes asistir a un grupo de apoyo en la iglesia, o hablar con el Padre Ignacio. Es un buen consejero.

“You don’t need a specialist,” answered Ana’s mom. “Family doctors are just as good at helping people with depression. You could go to the community health center or one of those chronic care homes to see a doctor or nurse and talk about what will help you. Not everyone needs medicine for depression either. Sometimes just talking helps. You could join a support group at the church, or talk with Father Ignacio. He is a good counselor.”
—Bueno, pues, es posible que hable con él si siga así —dijo Tío Miguel—. Pero ahora voy al trabajo.

“Hmm, okay, maybe I will talk to him if I keep feeling this way,” said Uncle Miguel. “But for now I have to go to work.”
El mes siguiente, la familia entera de Ana estaba en el parque para celebrar el cumpleaños de su hermano, Luis. Aun Tío Miguel, quien no había llegado a ninguna fiesta de la familia por mucho tiempo, estaba allá.

A month later, Ana’s entire family was at the park to celebrate her brother Luis’s birthday. Even Uncle Miguel, who hadn’t come to a family party in a long time, was there.
Cuando Ana vio a su Tío Miguel salir de la sombra, corrió hacia sus brazos abiertos, chillando—¡Tío, Tío, no creía que vinieras. ¡Me alegra que estés aquí!

When Ana saw Uncle Miguel step out of the shadows on the other side of the park, she ran into his arms squealing, “Uncle, Uncle, I didn’t think you would come. I’m so glad you’re here!”
—Va no quería estar siempre triste, Ana. Entonces, como sugirieron tú y tu mamá, fui a un centro comunitario de salud para visitar un doctor general. También, hablé con el Padre Ignacio dos veces por semana. Me anima y su amabilidad me pone más feliz...

“I got tired of being sad all the time, Ana. So like you and your mom suggested, I went to a community health center to see a family doctor. And I talk to Father Ignacio twice a week now. He encourages me and his kindness makes me feel less sad...”

—Además, tengo nueva esperanza y disfruto de las caras como antes—como balancearme en un columpio contigo, si quieres.

“And, I have hope and like doing the things I used to again—like playing on the swings with you, if you want.”
—Tío Miguel, me alegro que ya no estés tan triste —dijo Ana.

“Uncle Miguel, I’m glad you’re not as sad anymore,” said Ana.

—A mí también —respondió Tio Miguel—. Gracias por sugerirme que buscare ayuda. Estoy tan agradecido de tener el apoyo de mi familia y comunidad. Si no fuera por ti y tu mamá, jamás pensaría que tuviera depresión ni sabría que hay lugares en que puedo encontrar ayuda. Quizás seas doctora en el futuro para que puedas explicar la depresión a otras personas como yo.

“Me too,” replied Uncle Miguel. “Thanks for telling me to get help. I’m so grateful to have the support of my family and community. If it weren’t for you and your mom I wouldn’t even think that I have depression or know that there are places I can get help. Maybe you’ll be a doctor one day and explain depression to other people like me.”
—Ahora, ¿vamos a jugar en aquellos columpios?

“Now, how about we go play on those swings?”
University Honors College Copyright Release Form

We are planning to release this Honors Thesis in one or more electronic forms. I grant the right to publish my thesis / my abstract (circle one) entitled, The Creation of a Bilingual Children’s Book to Promote Mental Health Services among U.S. Latin@s, in the Honors College OSU Library’s Digital Repository (D-Space), and its employees the nonexclusive license to archive and make accessible, under conditions specified below.

The right extends to any format in which this publication may appear, including but not limited to print and electronic formats. Electronic formats include but are not limited to various computer platforms, application data formats, and subsets of this publication.

I, as the Author, retain all other rights to my thesis, including the right to republish my thesis all or part in other publications. I certify that all aspects of my thesis which may be derivative have been properly cited, and I have not plagiarized anyone else’s work. I further certify that I have proper permission to use any cited work which is included in my thesis which exceeds the Fair Use Clause of the United States Copyright Law, such as graphs or photographs borrowed from other articles or persons.

Signature:______________________________________________

Printed Name:___________________________________________

Date:__________________________________________________