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Experiences Of Non-Traditional Female College Students With Bipolar Disorder

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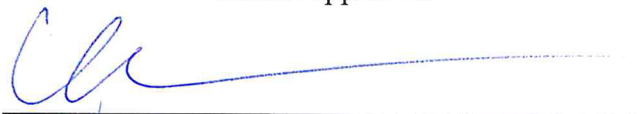
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EXPERIENCES OF NON-TRADITIONAL FEMALE COLLEGE STUDENTS
WITH BIPOLAR DISORDER

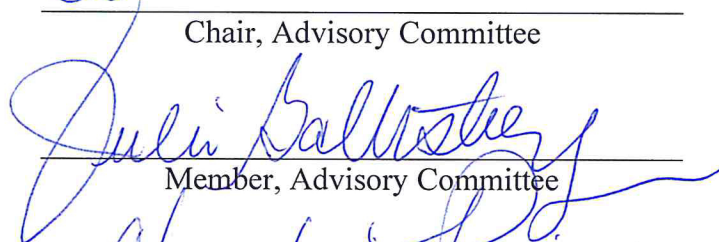
By

Taylor Lynn Massie

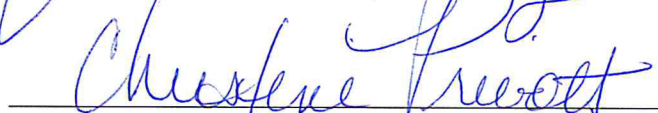
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EXPERIENCES OF NON-TRADITIONAL FEMALE COLLEGE STUDENTS
WITH BIPOLAR DISORDER

By

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Bachelor of Science in Occupational Science
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2014

Submitted to the Faculty of the Graduate School of
Eastern Kentucky University
in partial fulfillment of the requirements
for the degree of
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DEDICATION

This thesis is dedicated to my parents Susan and Jerry Massie, who have supported me throughout my time attending college.

ACKNOWLEDGMENTS

I would like to thank my thesis advisor, Dr. MaryEllen Thompson for helping me during the long journey of conducting my own research study. I would also like to thank Dr. Julie Baltisberger and Dr. Christine Privott for their guidance as my thesis committee. I would also like to thank my friends and family for all they have done for me over the past 6 years while I attended college in Richmond, Kentucky.

ABSTRACT

Background: Although research has been done on many aspects of bipolar disorder, research has not examined the individual living experiences of college students with bipolar disorder. Research looks at the

Methods: In-depth interviews were used to learn the details of the experience of attending college with bipolar disorder. Three volunteers came forward to be interviewed. They had a bipolar disorder diagnosis, and are current students at a southern university. Questions focused on the lived experience of being a student with bipolar disorder, and probing questions were used to learn more about each participant's particular experience. The first two interviews had primary codes applied, then secondary codes, then themes. The third interview was done to confirm or repute the results of the first two interviews

Results: The results of this study found three major themes throughout the three participants' interviews. The first theme was 'supports', which included categories of medication and treatments; family, co-worker, and church support systems; disability accommodations; mania as a support; and ideas the participants had that could further help students. The second theme was 'barriers', which included categories of suicidal thoughts and actions, stigma and judgment, the difficulty involved in diagnosing and treating bipolar disorder, and ideas from the participants on things that do not help them to have success in school. The third theme, "It's part of who I am" focuses on the fact that bipolar disorder has contributed to who they are as people at this stage in their life. Categories for this theme include grades, school as therapy, choosing where to live, staying away from campus, "It's part of who I am", and "at the beginning it's just about accepting it".

Conclusion: Occupational therapists can help clients with bipolar disorder become aware of and access accommodation services in higher education; when that client has a goal of successfully attending college. Occupational therapists can also advocate for a larger role on college campuses to help students with bipolar disorder through group intervention and to help them with medication management.

TABLE OF CONTENTS

Table of Contents	
CHAPTER I: LITERATURE REVIEW	1
CHAPTER II: EXPERIENCES OF NON-TRADITIONAL FEMALE COLLEGE STUDENTS WITH BIPOLAR DISORDER	34
Methods	39
Participants	39
Qualitative Cross-Case Analysis	42
Data Collection	43
Data Analysis	45
Results	46
Themes	46
Discussion	58
Person-Environment-Occupation Model of Practice	58
Compared to Previous Research	60
Limitations	62
Trustworthiness	62
Implications for Practice	63
Conclusion:	64
References	66
Appendices	73
A. E-mail Letter of Recruitment	74
B. Informed Consent in Eastern Kentucky University Format	76

LIST OF FIGURES

FIGURE	PAGE
Figure 1. Bipolar episode symptoms	1
Figure 2. Bipolar disorder definitions.....	2
Figure 3. Expressive qualities and long-term outcomes of BD	3
Figure 4. Intervention Effectiveness	6
Figure 5. Families with Bipolar Disorder	9
Figure 6. Stigma.....	13
Figure 7. Substance Abuse and Bipolar Disorder.....	16
Figure 8. Cognition	19
Figure 9. Bipolar Disorder in College.....	22
Figure 10. Symptoms of Mood Episodes.....	35
Figure 11. Pre-formulated Questions Examining the Impact of Bipolar Disorder on the College Experience	44
Figure 12. Disability Statement	48
Figure 13. Supports.....	50
Figure 14. Obstacles.....	53
Figure 15. “It’s part of who I am”	57

CHAPTER I: LITERATURE REVIEW

In the United States in 2013, 65.9% of high school graduates of that year were enrolled in college or university (Bureau of Labor Statistics, 2014). The National Institute of Mental Health (NIMH) reports that an average of 2.6% of adults in the U.S. are diagnosed with bipolar disorder (2012). The NIMH defines bipolar disorder as “a brain disorder that causes unusual shifts in mood, energy, activity levels, and the ability to carry out day-to-day tasks” with severe symptoms that interfere with relationships, school and job performance, and can lead to suicide (2012, para. 1). Given that an average of 26% of adults in the United States are diagnosed with bipolar disorder (NIMH, 2012), it is likely that there are current college students living with this diagnosis.

Bipolar episode symptoms	
Symptoms of mania or a manic episode include:	Symptoms of depression or a depressive episode include:
<p>Mood Changes</p> <ul style="list-style-type: none"> • An overly long period of feeling "high," or an overly happy or outgoing mood • Extreme irritability. <p>Behavioral Changes</p> <ul style="list-style-type: none"> • Talking very fast, jumping from one idea to another, having racing thoughts • Being unusually distracted • Increasing activities, such as taking on multiple new projects • Being overly restless • Sleeping little or not being tired • Having an unrealistic belief in your abilities <p>Behaving impulsively and engaging in pleasurable, high-risk behaviors</p>	<p>Mood Changes</p> <ul style="list-style-type: none"> • An overly long period of feeling sad or hopeless • Loss of interest in activities once enjoyed, including sex. <p>Behavioral Changes</p> <ul style="list-style-type: none"> • Feeling overly tired or "slowed down" • Having problems concentrating, remembering, and making decisions • Being restless or irritable • Changing eating, sleeping, or other habits • Thinking of death or suicide, or attempting suicide
<p><i>Source:</i> National Institute for Mental Health. (2012). Bipolar Disorder Among Adults. Retrieved March 16, 2015, from http://www.nimh.nih.gov/health/statistics/prevalence/bipolar-disorder-among-adults.shtml</p>	

Figure 1. Bipolar episode symptoms

Symptoms of bipolar disorder include intense emotional states referred to as “Mood episodes.” The person’s behavior during this time is extremely different compared to their normal or typical behavior. These mood episodes are referred to as manic episodes, depressive episodes, and mixed episodes. Figure 1 lists the National Institute for Mental Health’s identified symptoms of depressive and manic episodes. Someone experiencing a mixed episode would show symptoms from both a manic and depressive episode (NIMH, 2012).

Bipolar disorder definitions
<p>1. Bipolar I Disorder—defined by manic or mixed episodes that last at least seven days, or by manic symptoms that are so severe that the person needs immediate hospital care. Usually, depressive episodes occur as well, typically lasting at least 2 weeks.</p> <p>2. Bipolar II Disorder—defined by a pattern of depressive episodes and hypomanic episodes, but no full-blown manic or mixed episodes.</p> <p>3. Bipolar Disorder Not Otherwise Specified (BP-NOS)—diagnosed when symptoms of the illness exist but do not meet diagnostic criteria for either bipolar I or II. However, the symptoms are clearly out of the person's normal range of behavior.</p> <p>4. Cyclothymic Disorder, or Cyclothymia—a mild form of bipolar disorder. People with cyclothymia have episodes of hypomania as well as mild depression for at least 2 years. However, the symptoms do not meet the diagnostic requirements for any other type of bipolar disorder.</p>
<p><i>Source:</i> National Institute for Mental Health. (2012). Bipolar Disorder Among Adults. Retrieved March 16, 2015, from http://www.nimh.nih.gov/health/statistics/prevalence/bipolar-disorder-among-adults.shtml</p>

Figure 2. Bipolar disorder definitions

Under the new DSM-5, people can still be diagnosed with Bipolar I, Bipolar II, Cyclothymia, and now ‘other specified bipolar and related disorder’, instead of ‘Bipolar disorder Not Otherwise Specified’. Figure 2 shows the information that is still presented by the NIMH as of December 1, 2015, which reflects the DSM-IV-TR. Changes between DSM-IV-TR and the DSM-5, are minimal in this case but the change from ‘Bipolar disorder Not Otherwise Specified’ to ‘other specified bipolar and related disorder’ will help to diagnose people who do not fit into the other categories but are still not exhibiting

behavior that would be considered typical or normal (MIMH, 2012; American Psychological Association, 2013).

Expressive qualities and long-term outcomes of BD					
Author, year	Title	Study objectives/ Research Questions	Type of Research	Participants	Results
Forte, Baldessarini, Tondo, Vazquez, Pompili, & Girardi 2015	Long-term morbidity in bipolar-I, bipolar-II, and unipolar major depressive disorders	“To pool data on long-term morbidity, by type and as a proportion of time-at-risk, based on published studies and previously unreported data,” (p. 71).	Systematic Review	“Analyzed data from 25 samples involving 2479 unipolar depressive and 3936 bipolar disorder subjects treated clinically for 9.4 years,” (p. 71).	Proportions of time ill, surprisingly and similarly high across diagnoses: unipolar depressive (46.0%) bipolar I (43.7%), and bipolar II (43.2%). Morbidity was predominantly depressive: unipolar (100%), bipolar-II (81.2%), bipolar-I (69.6%). “Percent-time- ill did not differ between UP and BD subjects, but declined significantly with longer exposure times,” (p. 71).
Gudmundsson 2015	The bipolar II disorder personality traits, a true syndrome?	“The aim of this work was to understand how widely the Bipolar II disorder affects the personality, and what disturbing personality traits are the most common?” (p. 107).	Quantitative	“105 Bipolar II patients completed the Bipolar II Syndrome Checklist,” (p. 107).	“Symptoms like anxiety, low self esteem, paranoia, extreme hurtfulness, migraine, Post Partum Depression, obsessive traits, alcoholism in the family...” (p. 107) are commonly reported personality traits.

Figure 3. Expressive qualities and long-term outcomes of BD

Niitsu, Fabbri, & Serretti, 2015	Predictors of switch from depression to mania in bipolar disorder.	“The present study investigated the clinical predictors of switch from major depressive episodes to (hypo)manic/mixed episodes including into the analysis all the depressive episodes occurring for each patient during follow-up,” (p. 46).	Quantitative	4360 participants, meeting DSM-IV criteria for BD I, II or not otherwise specified, or schizoaffective disorder bipolar type	“Several baseline variables were associated with a higher risk of switch. They were younger age, previous history of: rapid cycling, severe manic symptoms, suicide attempts, amphetamine use and some pharmacological and psychotherapeutic treatments. During the current depressive episode, the identified risk factors were: any possible mood elevation, multiple mania-associated symptoms with at least moderate severity, and comorbid panic attacks,” (p. 45).
Pallaskorpi, Suominen, Mantere, Arvilommi, Valtonen, Isometsa... & Leppamaki, 2015	Five-year outcome of bipolar I and II disorders: Findings of the Jorvi Bipolar Study	To assess the five-year outcomes by following a secondary-care cohort of patients with BD.	Quantitative	151 patients remaining in follow-up at 5 years	“Nearly all subjects recovered from the index episode, but almost all (90%) had a recurrence, and most had multiple recurrences. The patients spent about one-third of their time in illness episodes and 15% of their time with subthreshold symptoms; half of the time they were euthymic... no difference in time spent in depressive states between patients with BD-I and BD-II persisted,” (p. 363).

Figure 3 (Continued)

Several approaches to research in bipolar disorder focus on long-term and predicting factors involved in the condition and research on this topic is summarized in Figure 3. Forte et al. (2015) found that depressive elements for all major affective disorders accounted for 86% of the 43-46% of time in affective episode, even though treatment is available. This led to the conclusion that intervention and treatment for depression needs to be improved and adherence to these interventions needs to be increased in terms of long-term use. Pallaskorpi et al. (2015) found that in a five year follow up, clients with bipolar I and bipolar II disorder spent about half of their time without symptoms and a third of their time in a mood episode. Ninety percent of these clients had a reoccurrence of a mood episode. This amount of time spent battling symptoms of bipolar disorder could greatly impact the amount of quality time spent engaged in school occupations. Niitsu, Fabbri, & Serretti (2015) found that indicators of a shifts from major depressive disorder to (hypo)manic/mixed episodes were associated with younger age and “previous history of: rapid cycling, severe manic symptoms, suicide attempts, amphetamine use and some pharmacological and psychotherapeutic treatments,” (p. 45). Shifts being more likely in younger ages could negatively impact clients with bipolar disorder trying to attend college after high school in early adulthood. Gudmundsson (2015) found that common personality traits and factors that commonly impact personality in individuals with bipolar disorder include anxiety, low self esteem, paranoia, extreme hurtfulness, migraine, Post Partum Depression, obsessive traits, alcoholism in the family. Many of these factors would contribute to increased difficulty in the ability to successfully engage in the occupation of attending college.

Intervention Effectiveness					
Author	Title	Study objectives/ Research Questions	Type of Research	Participants	Results
Gumus, Buzlu, & Cakir. 2015	Effectiveness of Individual Psychoeducation on Recurrence in Bipolar Disorder; A Controlled Study	“This study aimed to examine the effectiveness of adds on individual psychoeducation in recurrence rate of the illness,” (p. 175).	Quantitative Pretest-posttest control group and repeated measures	“82 outpatients in outpatient mental health clinic of an university hospital,” (p. 175).	<p>“ There were no hospitalizations in intervention group, while 7.3% of control patients experienced hospitalizations; recurrence rates were 18.9% in the intervention group patients and 34.1% in the control group patients, but statistical significant difference between the groups was not found.</p> <p>Four sessions of individual psychoeducation may have some positive effects but seem to be ineffective for preventing recurrences in patients with bipolar disorder during one year prospective follow up,” (p. 174)...</p>

Figure 4. Intervention Effectiveness

<p>Harvey, Soehner, Kaplan, Hein, Lee, Kanady, ... & Buysse, 2015</p>	<p>Treating Insomnia Improves Mood State, Sleep, and Functioning in Bipolar Disorder: A Pilot Randomized Controlled Trial</p>	<p>“To determine if a treatment for interepisode bipolar disorder I patients with insomnia improves mood state, sleep, and functioning,” (p. 564)...</p>	<p>Quantitative Pilot Study</p>	<p>“Participants were 58 adults with interepisode bipolar disorder Type I and insomnia recruited between March 2010 and April 2012 through clinicians or advertisements,” (p. 564).</p>	<p>The insomnia intervention group had fewer days in a bipolar episode relative to the psychoeducation group (3.3 days vs. 25.5 days). The insomnia group “experienced a significantly lower hypomania/mania relapse rate (4.6% vs. 31.6%) and a marginally lower overall mood episode relapse rate (13.6% vs. 42.1%) compared with the PE group,” (p. 564). Insomnia intervention “reduced insomnia severity and led to higher rates of insomnia remission at posttreatment and marginally higher rates at 6 months,” (p.564).</p>
<p>Miziou, Tsitsipa, Moysidou, Karavelas, Dimelis, Polyzoidou, & Fountoulakis, 2015</p>	<p>Psychosocial treatment and interventions for bipolar disorder: a systematic review</p>	<p>“The current study is a systematic review of the efficacy of available psychosocial interventions for the treatment of adult patients with BD,” (p. 2).</p>	<p>Systematic Review</p>	<p>78 Papers were included in the analysis.</p>	<p>The literature supports the usefulness only of psychoeducation for the relapse prevention of mood episodes and only in a selected subgroup of patients at an early stage of the disease who have very good, if not complete remission, of the acute episode. Cognitive-behavioural therapy and interpersonal and social rhythms therapy could have some beneficial effect during the acute phase, but more data are needed. Mindfulness interventions could only decrease anxiety, while interventions to improve neurocognition seem to be rather ineffective. Family intervention seems to have benefits mainly for caregivers, but it is uncertain whether they have an effect on patient outcomes.</p>

Figure 4 (Continued)

Morel, Chatton, CochandZullino, Borgeat, & Khazaal, 2008	Quality of web-based information on bipolar disorder.	“To evaluate web-based information on bipolar disorder and to assess particular content quality indicators,” (p. 265).	Quantitative	34 websites including information on bipolar disorder were included.	“Based on outcome measures, the content quality of the sites turned-out to be good. Content quality of web sites dealing with bipolar disorder is significantly explained by readability, accountability and interactivity as well as a global score,” (p. 265).
Murray, Leitan,..Berk, Thomas, Michalak, Berk, ... & Kyrios, 2015	Online mindfulness-based intervention for late-stage bipolar disorder: pilot evidence for feasibility and effectiveness	“The aim of the present study was to assess the feasibility, potential effectiveness, and any negative effects of ORBIT in an open pilot trial,” (p. 47).	Quantitative	Twenty-six people (Age $M=46.6$ years, $SD=12.9$) completed written informed consent procedures... Ten participants were lost to follow-up (38.5% attrition), with complete pre- and post-intervention data obtained from $n=16$,” (p. 47).	“Statistically significant improvement in QoL was found for the completers... and the intent-to-treat sample... A non-significant trend towards improvement was found on the DASS anxiety scale n both completer and intent- to-treat samples, but change on depression and stress did not approach significance,” (p. 46).

Figure 4. (Continued)

Some other approaches to research include examining types of interventions for BD and the effectiveness of them. This research is summarized in Figure 4. Miziou et al. (2015) conducted as systematic review and found that psychoeducational intervention prevents relapse into mood episode but only in clients who have very good/complete remission of first episode. It was also found that mindfulness intervention helps to decrease anxiety in clients. Family interventions have positive impacts on client

caregivers, more so than the client. Completion of online mindfulness intervention in the later stages of bipolar disorder reported improved quality of life (Murray et al., 2015). Web based bipolar disorder information was overall of good quality (Morel, Et al., 2008). Gumus, Buzlu, & Cakir (2015) found that 4 sessions of psychoeducational intervention had positive effects of clients, but did not prevent reoccurrence at 1 year follow-up. Comparing a psychoeducational control group to an insomnia intervention experimental group, the insomnia control group reported less time spent in a mood episode at follow-up (Harvey, et al., 2015). This could lead to the conclusion that insomnia intervention could be helpful to college students with bipolar disorder by improving sleep and decreasing time spent in a mood episode. Also seeing as web-based information on bipolar disorder is pretty good and mindfulness training online is available, individuals with bipolar disorder can get help reducing anxiety and learn more about possible treatments that could help them by searching the Internet.

Families with Bipolar Disorder					
Author	Title	Study objectives	Type of Research	Participants	Results
Crandall, E.K., Ruggero, C.J., Bain, K., & Kilmer, J, (2014)	Adjustment difficulties and caregiving burdens faced by college students with a parent with bipolar or depressive disorders	This study “assessed college adjustment difficulties, including increased caregiver burden, in students who come from families with a parent with bipolar or depressive disorder,” (p. 94).	Mixed methods	89 participants from a southern public university were split into three groups. One consisted of students who had one parent with BD, the second group contained students with one parent who has depressive disorder, and the last group consisted of students with parents with no history of mood disorder.	It was found that “students with a family history of bipolar disorder and MDD had significantly greater difficulty adjusting to college. These difficulties persisted even after controlling for whether the student themselves had been affected by a mood disorder. The students of a parent with either bipolar disorder or MDD also reported significantly more burden associated with caring for their parents,” (p. 47).

Figure 5. Families with Bipolar Disorder

<p>Gomes, F. G., Passos, I. C., Krolow, A. C., Reckziegel, R., Vasconcelos-Moreno, M. P., Spanemberg, L., ... Kauer-Sant'Anna, M. (2015).</p>	<p>Differences in parental bonding between schizophrenia and bipolar disorder: Evidence of prodromal symptoms?</p>	<p>“Our study aims to compare PBI (Parental Bonding Instrument) scores between patients with schizophrenia and bipolar disorder (BD),” (p. 134).</p>	<p>Quantitative</p>	<p>“analyze d PBI scores in 59 patients with schizophrenia, 36 with BD and 52 healthy controls using ANCOVA, with age, gender and years of education as covariates,” (p.134).</p>	<p>“In PBI maternal and paternal care domains, patients with schizophrenia showed significantly higher scores when compared with BD patients. However, when compared with healthy controls, patients with schizophrenia only showed significantly higher scores of PBI maternal care domain. BD patients showed significantly lower PBI care scores compared with healthy controls. In PBI maternal and paternal overprotection domain, BD patients showed significantly higher scores compared with patients with schizophrenia and healthy controls; while no significant difference was observed between patients with schizophrenia and healthy controls,” (p. 134).</p>
<p>Romero, S., DelBello, M.P., Soutullo, C.A., Stanford, K., & Strakowski, S.M. (2005).</p>	<p>Family environment in families with versus families without parental bipolar disorder: a preliminary comparison study.</p>	<p>“to compare family environmental characteristics of families with at least one bipolar parent and families with parents without any Axis I disorder,” (p. 617)..</p>	<p>Quantitative</p>	<p>Twenty-four families with at least one parent with bipolar disorder (BPD families) and 27 families with parents who are healthy (Healthy families, HF)</p>	<p>Seventeen of 24 BPD families had at least one child with a mood disorder, and 1 of 27 healthy families had a child with a mood disorder. BPD families reported lower cohesion, and expressiveness scores compared with HF, after controlling for SES differences of groups. Families with both parents having BPD reported higher cohesion scores than families with one parent diagnosed. There were no differences found in BPD families with versus without children with BPD. Compared with normative data**, BPD families reported lower cohesion, and independence scores and higher conflict, intellectual-cultural orientation, moral-religious emphasis and control scores. (**Normative data on the Family Environment Scale, scores based on FES subscales.)</p>

Figure 5. (continued)

Zullig, K.J., Teoli, D.A., & Ward, R.M. (2011)	Not all developmental assets are related to positive health outcomes in college students.	“The purpose of this study is to explore the concurrent relationships between the developmental assets**, life satisfaction, and HRQOL (health related quality of life.” (p. 2) **Search Institute’s Developmental Asset Framework suggests 40 internal and external assets that may affect healthy youth development	Quantitative	1,300 students over 18 years old , were randomly selected from a Midwestern university’s e-mail database, with equal numbers selected from each academic class	“First, participants who reported increased Family Communication also reported higher levels of life satisfaction. Second, as participants reported having more Non-Parental Role Models, life satisfaction decreased and poor mental health HRQOL days increased. Finally, increased Future Aspirations was related to increased poor mental health HRQOL days,” (p. 1).
Ruggero CJ, Bain KM, Smith PM, & Kilmer JN. (2015).	Dysfunctional Cognitions among Offspring of Individuals with Bipolar Disorder.	“The aim of the present study therefore was to determine whether dysfunctional cognitive styles associated with bipolar disorder... would be present among the young adult offspring of individuals affected by bipolar disorder, even after controlling for whether or not the offspring themselves had developed a mood disorder,” (p. 451).	Mixed Methods	“Participants (N = 89) were young adult college students with a parent with bipolar disorder (n = 27), major depressive disorder (MDD; n = 30), or no mood disorder (n = 32),” (p. 449).	“Unlike offspring of parents with MDD or no mood disorder, those with a parent with bipolar disorder endorsed significantly more dysfunctional cognitions associated with extreme appraisal of mood states, even after controlling for their own mood diagnosis. Once affected by a bipolar or depressive disorder, offspring endorsed dysfunctional cognitions across measures,” (p. 449).

Figure 5. (Continued)

A highly researched area of bipolar disorder is the effect of a parent in a family having Bipolar disorder on children and young adults. Figure 5 summarizes research on the impact of bipolar disorder within a family unit. Parents with bipolar disorder who took the Parental Bonding Instrument (PDI) reported lower scores than the health cohort in the care domain and higher scores in the overprotection domain (Gomes, et al., 2015). Children of a person with bipolar disorder were shown to have significantly more dysfunctional cognition associated with extreme appraisal of mood states (Ruggero, Bain, Smith, & Kilmer, 2015). It was found that 17 of 24 families with at least one parent with bipolar disorder had at least one child with a mood disorder, and these families reported less cohesion. Families that had two parents with bipolar disorder reported higher family cohesion (Romero, DelBello, Soutullo, Stanford, & Strakowski, 2005). In a typical college student cohort, family communication correlated with higher levels of life satisfaction (Zullig, Teoli, & Ward, 2011). Those with a family history of bipolar disorder were more likely to report greater difficulty adjusting to college, whether or not the respondent was affected by a mood disorder (Crandall, Ruggero, Bain, & Kilmer, 2014). Family environment can have a large impact on the likelihood of a young adult to go to college. Having a parent with a mood disorder, diagnosed or not, can contribute to inability to gain control over one's own illness in adulthood. Not being able to control one's own bipolar disorder can lead to detrimental impacts on the children of parents with bipolar disorder. Bipolar disorder can impact the occupation of parenting, which is commonly a co-occupation to attending college.

Stigma					
Author	Title	Study objectives/ Research Questions	Type of Research	Participants	Results
Furnham, A., & Anthony, E. (2010).	Lay theories of bipolar disorder: The causes, manifestations and cures for perceived bipolar disorder.	“This study aimed to investigate lay theories of the cause and treatment of bipolar disorder, and the recognition of symptoms,” (p.255).	Quantitative	173 participants (111 classified as lay, and 63 classified as academic) ages 18-77 years old completed a 3-part questionnaire.	The studies participants were able to recognize bipolar disorder 43.4% of the time, compared to 89.6% correctly identifying depression and 34.1% correctly identifying schizophrenia. Participants agreed that bipolar disorder is caused by childhood trauma, drugs, genes, and a chemical imbalance in the brain; also they agreed that lack of sleep can lead to mania. Lay people, widowers, right wing participants, and those with no education higher than GCSEs believed in the effectiveness of <i>Psychological</i> treatments; those with no interest in mental disorders believed an effective treatment is <i>Willpower</i> .
Hampton, N.Z., & Sharp, S. (2014)..	Internal motivation to respond without prejudice as a mediator of gender-attitudes towards mental illness	“This study examined the mediating role of motivation to respond without prejudice on gender differences in attitudes toward mental illness,” (p. 30).	Quantitative	“Three hundred and seventy university students participated in the study,” (p. 30).	“Findings showed that (a) gender alone predicted attitudes toward people with mental illness as females had more favor able attitudes toward people with mental illness than did males, (b) females had higher levels of internal motivation to respond without prejudice than did males, and (c) gender difference in internal motivation to respond partially mediated the relationship between gender and attitudes toward mental illness,” (p. 30).

Figure 6. Stigma

<p>Hawke, L.D., Michalak, E.E., Maxwell, V., & Parikh, S.V. (2014)</p>	<p>Reducing stigma toward people with bipolar disorder: Impact of a filmed theatrical intervention based on a personal narrative</p>	<p>“This study reports on the impact of the CREST.BD-CANMAT* stigma-reduction intervention in filmed format**,” (p.741).</p> <p><u>*CREST.BD-CANMAT – Collaborative REsearch Team to study psychosocial issues in Bipolar Disorder and the Canadian Network for Mood and Anxiety Treatments</u></p>	<p>Quantitative</p>	<p>“Through collaboration with partner organizations the DVD was presented to 137 participants in four target audiences.” (1) Health-care professionals (32) (2) People with BD and their family and friends (48) (3) Students taking health care courses (28) (4) Members of the general public. (29)” (p. 743)</p>	<p>Health service providers in the study showed statistically significant improvements in several categories of stigmatizing attitudes, with maintenance one month later. The other groups showed a more modest impact. “Students demonstrated progressive, significant improvements in the desire for (less) social distance,” (p.741). Improvements observed in the BD community and the general public were limited and eroded over time.</p>
<p>Smeets, E., Neff, K., Alberts, H., & Peters, M. (2014).</p>	<p>Meeting Suffering With Kindness: Effects of a Brief Self-Compassion Intervention for Female College Students.</p>	<p>“The present study investigated the effectiveness of a newly developed 3-week self-compassion group intervention for enhancing resilience and well-being among female college students,” (p. 794).</p>		<p>“Fifty-two students were randomly assigned to either an intervention designed to teach skills of self-compassion ($n = 27$) or an active control group intervention in which general time management skills were taught ($n = 25$),” (p. 794).</p>	<p>“Results showed that the self-compassion intervention led to significantly greater increases in self-compassion, mindfulness, optimism, and self-efficacy, as well as significantly greater decreases in rumination in comparison to the active control intervention. Whereas both interventions increased life satisfaction and connectedness, no differences were found for worry and mood,” (p. 1).</p>

Figure 6. (Continued)

A social stigma is commonly applied to people of the community with bipolar disorder. Research exploring stigma associated with bipolar disorder is summarized in figure 6. That means that there has been research done to examine what stigmas are applied. Furnham & Anthony (2010) found that depression symptoms were most commonly identified (89.6%), compared to bipolar disorder symptoms (43.4%) and schizophrenia symptoms (34.1%). Participants agreed that bipolar disorder is caused by childhood trauma, drugs, genes, and a chemical imbalance in the brain; also they agreed that lack of sleep can lead to mania. It was also found that people with no interest in mental illness believe that willpower is an effective treatment. Another finding on stigma suggests that women are generally more accepting of mental illness and had higher levels of internal motivation to respond without prejudice (Hampton & Sharp, 2014). Research also looks at intervention that helps reduce stigma. For example, the CREST.BD-CANMAT (Collaborative Research Team to study psychosocial issues in Bipolar Disorder and the Canadian Network for Mood and Anxiety Treatments) filmed stigma reduction intervention was shown to a variety of participants. Health service providers in the study showed statistically significant improvements in several categories of stigmatizing attitudes, with maintenance one month later. Students endorsed progressive, significant improvements in the yearning for less social distance between themselves and individuals with bipolar disorder (Hawke, Michalak, Maxwell, & Parikh, 2014). Self-compassion interventions were shown to increase self-compassion, mindfulness, optimism, and self-efficacy significantly in female college students (Smeets, Neff, Alberts, & Peters, 2014). Interventions that target stigma in the community population at large can help to support students with bipolar disorder to help them feel better accepted

in the community. Increasing the general population’s understanding of the causes, treatments, and disease course of different disorders such as depression and bipolar disorder, can help these individuals with bipolar disorder be more comfortable being themselves and asking for help if they need it.

Substance Abuse and Bipolar Disorder					
Author	Title	Study objectives/ Research Questions	Type of Research	Participants	Results
Bauer, I. E., Meyer, T. D., Sanches, M., Zunta-Soares, G., & Soares, J. C. (2015).	Does a history of substance abuse and illness chronicity predict increased impulsivity in bipolar disorder?	“The aim of this cross-sectional study is to investigate the predictive power of indicators of illness chronicity such as illness duration and the number of prior mood episodes on impulsivity in BD, and determine whether a history of SUD (substance use disorder) additionally explains elevations in impulsivity above and beyond indicators of illness chronicity. Further, we aim to determine whether self-ratings (i.e. BIS) and behavioral measures from the CANTAB battery measure heterogeneous or similar facets of impulsivity,” (p. 143).	Cross-sectional study, quantitative	“103 BD patients with and without a lifetime history of SUD (36.8 years, 40 males) were recruited,” (p. 142).	“Variance in the BIS, number of false alarms on the Rapid Visual Processing task and other impulsivity indicators of the Cambridge Gambling Task (CGT) was not explained by the chosen variables. Only an increased number of commission errors in the negative condition of the Affective Go/No Go task was significantly associated with illness chronicity. Furthermore there was a trend suggesting a relationship between a lifetime history of SUD and increased propensity to risk-taking during the CGT,” (p. 142).

Figure 7. Substance Abuse and Bipolar Disorder

<p>Bitter, S. M., Adler, C. M., Eliassen, J. C., Weber, W. A., Welge, J. A., Burciaga, J., Shear, P.K., Strakowski, S.M., & DelBello, M. P. (2014).</p>	<p>Neurofunctional Changes in Adolescent Cannabis Users with and without Bipolar Disorder.</p>	<p>“To compare regional brain activation among adolescents with bipolar disorder and co-occurring cannabis use disorder,” (p. 1901).</p>	<p>Cross-Sectional Study</p>	<p>“Adolescents with bipolar disorder (BP, $n = 14$), adolescents with cannabis use disorder (MJ, $n = 13$), adolescents with co-occurring cannabis use and bipolar disorders (BPMJ, $n = 25$) and healthy adolescents (HC, $n = 15$),” (p. 1901).</p>	<p>Conclusion: “Bipolar adolescents with comorbid cannabis use do not exhibit the same over-activation of the regions involved in emotional processing as seen in adolescents with bipolar disorder alone. The absence of these findings in patients with comorbid bipolar and cannabis use disorders suggests that these individuals may have a unique endophenotype of bipolar disorder or that cannabis use may alter brain activation uniquely in bipolar disorder patients who use cannabis,” (p. 1901).</p>
<p>Farren, C.K., Snee, L., Daly, P., & McElroy, S. (2013)</p>	<p>Prognostic factors of 2-year outcomes of patients with comorbid bipolar disorder or depression with alcohol dependence: Importance of early abstinence</p>	<p>“To investigate the prognostic factors that determine two-year outcomes in a group of alcohol dependent patients with depression or bipolar disorder who were treated in an intensive four-week inpatient programme,” (p. 93).</p>	<p>Quantitative</p>	<p>189 people with a mood disorder diagnosis of major depression or bipolar disorder with co-occurring alcohol dependence. All persons were referred by a physician or psychiatrist to the inpatient program (consisting of detoxification and mood stabilization, then the 4-week inpatient program, and followed by aftercare on a weekly basis for 2 months, a bi-weekly basis for the next two months and monthly for the last two months).</p>	<p>“Early abstinence (at 6 months) predicted better abstinence overall at 2 years; and bipolar alcoholics had a better outcome in drinks per drinking day than depressed alcoholics at 2 years. Younger participants (age 18-30 years) did relatively worse than middle-age (30-50 years) and older (51+ years) participants in measures of abstinence and number of drinks per drinking day at 2 years; and females did better than males in number of drinks per drinking day at 2 years,” (p. 93).</p>

Figure 7. (Continued)

Goldberg, J.F., & Ernst, C.L. (2004).	Clinical correlates of childhood and adolescent adjustment in adult patients with bipolar disorder	This study sought to provide “more information about clinical correlates, of premorbid functioning in adult bipolar outpatients relative to subsequent illness course and psychosocial adjustment,” (p. 187).	Quantitative	Fifty-six participants were made up by 46 bipolar I patients, 7 bipolar II patients, and 3 patients diagnosed with bipolar not otherwise specified. All of these adult outpatients were seen in the Bipolar Disorders Research Clinic of the New York Presbyterian Hospital.	“Poor childhood or adolescent adjustment was associated with subsequent alcohol or drug abuse or dependence, insidious onset of bipolar disorder, and increased suicide attempts. Poor adjustment in childhood was related to lifetime development of rapid cycling. Poor premorbid adjustment may be linked with the potential to develop substance abuse comorbidity and an increased risk for suicide attempts and rapid cycling in bipolar disorder.
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Figure 7. (Continued)

Substance abuse is commonly a comorbid condition to bipolar disorder and other mood disorders (National Institute on Drug Abuse, 2010). Naturally, research has been done to examine the different aspects of these comorbid diseases, and the way in which they are expressed. This research is summarized in Figure 7. Bauer et al. (2015) found that there is a possible relationship between and lifetime history of substance use and risk-taking in the Cambridge Gambling Task (CGT). Bitter et al. (2014) found that adolescents with bipolar disorder and cannabis use disorder did not exhibit the same over-active brain activity in the emotional processing areas of the brain, and they concluded that individuals with bipolar disorder may have unique reaction to cannabis or that cannabis use may alter brain activity over time. Farren, Snee, Daly, and McElroy (2013) found that abstinence at 6 months predicted better abstinence at 2 years, and bipolar drinkers had better outcomes than depressed drinkers at 2 years. Goldberg & Ernst (2004) found that poor adjustment in early years were correlated with alcohol or

drug abuse or dependence, insidious onset of bipolar disorder, increase in suicide attempts, and lifetime development of rapid cycling. Substance use is commonly associated with college attendance, and there is a good chance that some people with bipolar disorder and a comorbid substance abuse disorder would go back to college. Researching personal factors such as risk-taking behaviors can help to guide treatment of these individuals, and researching recovery outcomes can also help these individuals to be most successful.

Cognition					
Author	Title	Study objectives/ Research Questions	Type of Research	Participants	Results
Bourne, C., Bilderbeck, A., Drennan, R., Atkinson, L., Price, J., Geddes, J. R., & Goodwin, G. M. (2015).	Verbal learning impairment in euthymic bipolar disorder: BDI v BDII	<p>“The current study investigated cognitive performance of BDI and BDII patients on a verbal learning and memory task in a relatively large patient sample</p> <p>(N 1/4 279) in an attempt to clarify the existing literature,” (p. 96).</p>	Quantitative	“A total of 279 participants were available for analysis, which comprised 183 BDI and 96 BDII out-patients,” (p. 96).	“BDI patients were significantly impaired relative to BDII patients on all five VLT outcome measures after controlling for the other variables [Effect Sizes 1/4.13–.17]. The impairments seem to be unrelated to drug treatment and largely unrelated to illness variables, although age of onset affected performance on three outcome measures and number of episodes of mood elevation affected performance on one,” (p. 95).

Figure 8. Cognition

<p>Harvey, P.D., Paschall, G., & Depp, C. (2015).</p>	<p>Factors influencing self-assessment of cognition and functioning in bipolar disorder: a preliminary study.</p>	<p>To examine the correlates between different factors which influence self-assessment of cognition and functioning in individuals with bipolar disorder</p>	<p>Quantitative Pilot Study</p>	<p>“30 patients with a lifetime history of bipolar I disorder and current bipolar depression completed performance-based tests of cognition and functional capacity and self-reported their opinions of their cognitive abilities, everyday functioning and symptoms,” (p. 361).</p>	<p>Clinician impressions of cognition and everyday functioning were correlated with the results of the performance-based assessments, whereas the patient self-reports of cognition and functioning were uncorrelated both with their own performance and with the clinician impressions. However, severity of depressive symptoms was correlated with self-reports of functioning in cognitive and functional domains, but not with either performance-based data or clinician impressions of cognition or functioning,” (p. 361) .</p>
<p>Rodriguez, C., Ruggero, C. J., Callahan, J. L., Kilmer, J. N., Boals, A., & Banks, J. B. (2013).</p>	<p>Does risk for bipolar disorder heighten the disconnect between objective and subjective appraisals of cognition?</p>	<p>This study “sought to compare the objective measure of working memory with a more subjective self-appraisal of cognitive functioning as reflected on the Cognitive Failures Questionnaire (CFQ; Broadbent et al.,1982), which asks individuals to rate errors in their everyday cognitive functioning including their memory,” (p. 401).</p>	<p>Quantitative</p>	<p>“One hundred and twenty-eight undergraduates from a large public university participated in the study for course credit,” (p. 401).</p>	<p>“Contrary to expectation, risk for bipolar disorder did not significantly predict poorer working memory. However, a person’s risk for bipolar disorder was associated with higher self-appraisal of cognitive functioning relative to those with lower risk despite there being no indication of a difference in ability on the working memory task,” (p. 400).</p>

Figure 8. (Continued)

Burdick, K. E., Endick, C. J., & Goldberg, J. F. (2005).	Assessing cognitive deficits in bipolar disorder: Are self-reports valid?	“The present investigation studied the concordance between objective neuropsychological deficits and self-reported cognitive impairment in a well-characterized group of bipolar outpatients,” (p. 44).	Quantitative	“The study group included 37 adult, non-psychotic, outpatients meeting DSM-IV criteria for bipolar I (n = 24) or bipolar II (n=13) disorder, in various phases of illness [depressed (n=4), mixed (n=2), hypomanic (n=9), and stable (n=22)],” (p. 44).	More than 75% of our sample of bipolar patients displayed some cognitive deficits, most notably in the domains of verbal learning and memory. In general, patients’ self-reports of impairment failed to reliably predict objective neuropsychological deficits. Mood ratings for mania and depression were not significantly correlated with any of the self-report inventories or the objective neuropsychological variables,” (p.43).
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Figure 8. (Continued)

Research involving the cognition of individuals is summarized in Figure 8.

Bourne et al. (2015) found that individuals with bipolar I disorder scored significantly lower than their bipolar II counterparts on five areas of visual learning. Burdick, Endick, & Goldberg (2005) found that 75% of their bipolar sample showed some cognitive deficits, especially in the areas of verbal learning and memory. This study also revealed that the sample’s self-reports of impairment did not predict objective deficits. Harvey, Paschall, & Depp (2015) found that clinicians could accurately describe the daily functioning and cognition of patients, that correlated with the results of an assessment. However patients could not self-report levels of functioning and cognition that correlated with clinician’s opinion or assessment results. Rodriquez et al. (2003) found no correlation between risk for bipolar disorder and poorer working memory in these individuals. However research did show that those at risk for bipolar disorder tend to rank their cognitive functioning higher than peers at lower risk for bipolar disorder, even

though a working memory task did not show any difference in cognitive functioning between the two groups. Cognition is an important area of research to examine to make sure that we have an understanding of how people with bipolar disorder think and use cognition in their everyday life. Knowing that individuals with bipolar disorder have a tendency to over inflate their idea of their own cognitive functioning could be important to guiding future outcomes for the client. They may think they are capable of doing something (like completing a certain major in college) that could end up being too much of a challenge for them. Knowing what areas of learning these individuals have trouble with could help the individual come up with study tactics that address their strengths. Overall, having an idea of how people with bipolar disorder generally think, use their skills, and rank their skills can help guide treatment to help address weaknesses through use of strengths.

Figure 9: Bipolar Disorder in College					
Author	Title	Study objectives/ Research Questions	Type of Research	Participants	Results
Bae, S.O., Kim, M.D., Lee, J.G., Seo, J.S., Won, S.H., Woo, Y.S., .. & Yoon, B.H. (2013).	Prevalence of bipolar spectrum disorder in Korean college students according to the K-MDQ.	“The purpose of this study was to assess the prevalence of bipolar spectrum disorder (BSD) in the general Korean population,” (p. 869).	Quantitative	“A sample of college students (n = 1026) was stratified to reflect geographical differences accurately in Korean college students,” (p. 869).	“The prevalence of BSD was 18.6% in total, being 19.8% in men and 17.5% in women. The prevalence of BSD was more common in rural dwellers than in urban dwellers. Univariate and multivariate regression models showed that rural residence was a significant factor associated with BSD. There were significant relationships between BSD and gender, age, and socioeconomic status.

Figure 9. Bipolar Disorder in College

<p>Blanco, C., Okuda, M., Wright, C., Hasin, D.S., Grant, B.F., Liu, S.M., & Olfson M. (2008).</p>	<p>Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions.</p>	<p>“To assess the 12-month prevalence of psychiatric disorders, socio-demographic correlates, and rates of treatment among individuals attending college and their non-college attending peers in the United States,” (p. 1429).</p>	<p>Quantitative</p>	<p>Adults aged 19-25 years, who have attended college in the past 12 months. These individuals had previously responded to NESARC, a national survey conducted by the US census Bureau. Those who attended college equaled 2188 persons. Non-college attending persons equaled 2904 participants.</p>	<p>The overall rate of psychiatric disorders was not different between those who attended and did not attend college. Bipolar disorder was less common in the group of college attending adults.</p>
<p>Hunt, J., Eisenberg, D., & Kilbourne, A.M. (2010).</p>	<p>Consequences of receipt of a psychiatric diagnosis for completion of college.</p>	<p>“The purpose of this study was to evaluate the independent associations between <i>DSM-IV</i> psychiatric disorders and the failure to complete college among college entrant,” (p. 399).</p>	<p>Quantitative</p>	<p>Sample consisted of 15,800 adults, aged 22 or older who at least entered college, giving information through the NESARC, a population-base survey providing data about alcohol use and psychiatric and medical comorbidities.</p>	<p>Evaluation showed correlations between certain psychiatric diagnoses and graduating college. “Five diagnoses were positively and significantly associated with the failure to graduate from college. Four were axis I diagnoses: bipolar I disorder, marijuana use disorder, amphetamine use disorder, and cocaine use disorder. One was an axis II diagnosis: antisocial personality disorder,” (p. 399).</p>

Figure 9. (Continued)

Hussain, R., Guppy, M., Robertson, S., & Temple, E. (2013).	Physical and mental health perspectives of first year undergraduate rural university students	“This study examined the physical and mental health issues for first year Australian rural university students and their perception of access to available health and support services,” (p. 1).	Cross-sectional study, mixed methods	355 students (244 females, 111 males), all first-year undergraduate students enrolled in an on-campus degree program.	“ The majority of the students lived in on-campus residential college style accommodation, and a third combined part-time paid work with full-time study. Most students reported being in good physical health. However, on average two health conditions were reported over the past six months, with the most common being fatigue (56%), frequent headaches (26%) and allergies (24%). Mental health problems included anxiety (25%), coping difficulties (19.7%) and diagnosed depression (8%). Most respondents reported adequate access to medical doctors and support services for themselves (82%) and friends (78%). However the qualitative comments highlighted concerns about stigma, privacy and anonymity in seeking counseling,” (p. 1).
McAllister, M., Wynaden, D., Happell, B., Flynn, T., Walters, V., Duggan, R., .. Gaskin, C. (2014).	Staff experiences of providing support to students who are managing mental health challenges: A qualitative study from two Australian universities.	This study aimed to “explore the nature, extent, and impacts of interactions between university staff engaging with students who disclose that they are experiencing a mental health challenge,” (p 193).	Qualitative	Twenty-seven university staff from 2 Australian University, recruited using snowball sampling.	“Four themes emerged: (1) Factors that facilitate initiation of staff support: (2) Barriers to providing support: (3) challenges facing staff: and (4) how universities support students with mental health challenges,” (p. 192).

Figure 9. (Continued)

<p>Mojtabai, R., Stuart, E. A., Hwang, I., Eaton, W. W., Sampson, N., & Kessler, R. C. (2015).</p>	<p>Long-term effects of mental disorders on educational attainment in the National Comorbidity Survey ten-year follow-up</p>	<p>“The study sought to examine the association of mental disorders with educational attainment in a community sample,” (p. 1).</p>	<p>Quantitative</p>	<p>“Discrete-time survival analysis was used to examine the association of disorders present at baseline (NCS) or having first onset after the baseline (assessed in NCS-2) with educational outcomes among 3954 eligible respondents,” (p. 1).</p>	<p>“Among students, baseline bipolar and externalizing disorders, as well as fear, anxiety-misery and externalizing disorders with onset after baseline were associated with lower odds of high school graduation; baseline anxiety-misery disorders with lower odds of going to college; and baseline externalizing disorders and bipolar disorder with onset after baseline with lower odds of college graduation. Among non-students, baseline fear disorders were associated with lower odds of high school graduation and bipolar disorder with lower odds of going to college. Assuming that the regression coefficients represent causal effects, mental disorders accounted for 5.8–11.0 % of high school and 3.2–11.4 % of college non-completion,” (p. 1).</p>
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Figure 9. (Continued)

<p>Nunes M., Syed T., De Jong M., Ferrari J., Walker J.R., Stewart D.W., ... Swinson R.P. (2014).</p>	<p>A national survey of student extended health insurance programs in postsecondary institutions in Canada: Limited support for students with mental health problems</p>	<p>“The purpose of this study was to address this information gap by surveying the extended health insurance plans available to undergraduate students at colleges and universities across Canada to evaluate the extent of coverage for prescription medication and for psychotherapy and counseling services,” (p. 103).</p>	<p>Quantitative</p>	<p>Information about extended health insurance coverage from 210 postsecondary institutions was collected.</p>	<p>“Sixty-eight percent of universities and 41% of colleges provided private extended health insurance. For those institutions with these plans, the amount of coverage for prescription medication would adequately cover the yearly average cost of most medication treatments for problems such as anxiety or depressive disorders. Seventy-one percent of plans had maximum coverage of at least \$3,000 a year and 28% had no maximums. Sixty-nine percent of universities and 28% of colleges have plans that provide coverage for psychotherapy. For institutions with this coverage, the modal level of total coverage was in the range of \$300 to \$500 per year. Very few plans provide sufficient coverage for the psychological treatment of common mental health problems,” (p. 101).</p>
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Figure 9. (Continued)

<p>Nusslock, R., Abramson, L. Y., Harmon-Jones, E., Alloy, L. B., & Hogan, M.E. (2007).</p>	<p>A goal-striving life event and the onset of hypomanic and depressive episodes and symptoms: Perspective from the behavioral approach system (BAS) dysregulation theory</p>	<p>This study “examined the relation between occurrence of a BAS activation-relevant life event—goal striving—and onset of hypomanic and depressive episodes and symptoms. In particular, the authors examined the relation between preparing for and completing final exams (a goal-striving event) and onset of bipolar spectrum episodes and symptoms in college students with bipolar II disorder or cyclothymia (i.e., “soft” bipolar spectrum conditions),” (p. 105).</p>	<p>Quantitative</p>	<p>One hundred and fifty-nine individuals with either a bipolar spectrum disorder or no major affective psychopathology, were already part of an ongoing longitudinal study, and all were undergraduate or graduate students at University of Wisconsin-Madison and were aged 18 to 24 years.</p>	<p>“Consistent with the BAS dysregulation theory, preparing for and completing final exams was associated with an increase in hypomanic but not depressive episodes and symptoms in individuals with a soft bipolar spectrum diagnosis,” (p. 105).</p>
<p>Patel, N.C., DelBello, M.P., & Strakowski, S.M. (2006)</p>	<p>Ethnic differences in symptom presentation of youths with bipolar disorder</p>	<p>“To compare symptom profiles of African-American and white adolescents with a diagnosis of bipolar disorder,” (p. 95).</p>	<p>Quantitative</p>	<p>Seventeen African American and 61 white adolescents with bipolar disorder (aged 12-18 years) were recruited as part of the University of Cincinnati’s First-Episode Mania Study.</p>	<p>“Ethnic differences existed in manic and positive symptom profiles, but not depressive symptoms. Compared with the white cohort, African-American youths were diagnosed more frequently as having psychotic features, and had higher ratings for auditory hallucinations,” (p. 95).</p>

Figure 9. (Continued)

Schindler, V.P., & Kientz, M. (2013).	Supports and barriers to higher education for individuals diagnosed with mental illness.	“This study examined supports and barriers to higher education and employment based on quantitative and qualitative reports of individuals diagnosed with mental illness who were enrolled in a program that addressed higher education and employment goals,” (p. 29).	Mixed Methods	“Forty-eight adult participants with various mental health diagnoses,” (p. 29).	“The mean number of supports for higher education was 9.8 and for employment was 6.2. Quantitative supports with the highest endorsement rates reflected a combination of supports internal and external to the individual. The qualitative data reflected supports primarily external to the individual. The mean number of barriers for higher education was 4.8 and for employment was 4.25. Barriers common to both higher education and employment in the quantitative and qualitative data reflected internal barriers such as fears and anxieties, lost motivation and inability to concentrate,” (p.29).
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Figure 9. (Continued)

<p>Siegel, R. S., Freeman, A. J., La Greca, A. M., & Youngstrom, E. A. (2015).</p>	<p>Peer Relationship Difficulties in Adolescents with Bipolar Disorder</p>	<p>“This study compared perceived friendship quality and peer victimization in adolescents with PBD to external community benchmarks and to adolescents with other psychopathology. We also measured the association between peer difficulties and current mood symptoms across diagnoses,” (p. 355).</p>	<p>Quantitative</p>	<p>“Participants were 189 adolescents, ages 10–17 years (46 % female; 58 % African American, 32 % Caucasian, 10 % Other), recruited from a community mental health center (n = 73) and an academic medical center (n = 116),” (p. 355).</p>	<p>“Adolescents with PBD reported significantly fewer positive and negative qualities in a close friendship and more relational victimization than external community controls. There were no significant differences between adolescents with PBD and those with other psychopathology. Depression and (hypo)mania were both associated with more negative friendship quality and peer victimization,” (p. 355).</p>
<p>Sung, K.M., & Puskar, K.R. (2006).</p>	<p>Schizophrenia in college students in korea: A qualitative perspective</p>	<p>“The objective of this study was to identify the salient themes that characterize the life experiences of college students with schizophrenia,” (p. 21).</p>	<p>Qualitative</p>	<p>“Twenty-one schizophrenia patients enrolled in college underwent in-depth interviews employing semi structured questionnaires,” (p. 21).</p>	<p>“Analyses revealed 25 themes and six categories of experience. Subjects reported the experiences of school life (23.6%), interactions with family (22.2%), interactions with friends (21.9%), a mental illness (20.5%), everyday life (6.1%), and social role performance (5.7%),” (p. 21).</p>

Figure 9. (Continued)

Research exploring the theme of bipolar disorder in college is summarized in Figure 9. Blanco et al. (2008) found that overall psychiatric disorder rates were no different between those attending and not attending college, but bipolar disorder was less common in the college-attending cohort. Mojtabai et al. (2015) Looked at the long-term effects of a mental disorder on educational attainment. Students who had externalizing disorders and bipolar disorder, or fear, anxiety-misery and externalizing disorders diagnosed after base line data collection were found to have lower odds of high school graduation. Participants with bipolar disorder with onset after baseline were found to be less likely to graduate college. Overall, participants with bipolar disorder were found to be less likely to attend college all together. Researchers found that “mental disorders accounted for 5.8–11.0 % of high school and 3.2–11.4 % of college non-completion,” (p. 1). Nunes et al. (2015) looked at the access that Canadian college students have to prescription medication, psychotherapy, and counseling services. It was found that these students with private health insurance through their school could probably afford a year’s supply of prescription medication for disorders like anxiety and depression. However, psychotherapy was only covered in 69% of university’s and 28% of college’s health plans, and overall very few plans provide enough coverage to comprehensively treat common mental health problems. Nusslock, Abramson, Harmon-Jones, Alloy, & Hogan (2007) found that in students with soft bipolar disorder, the preparation for and completion of final exams in higher education correlated with an increase in hypomanic episodes and symptoms. Patel, DelBello, & Strakowski (2006) found differences in the presentation of symptoms in adolescents of different ethnicities. African-American youths were more often diagnosed with psychotic features with higher auditory

hallucination ratings. Siegel, Freeman, La Greca, & Youngstrom (2015) found that adolescents with Bipolar disorder reported significantly fewer qualities in a close friendship, including both positive and negative qualities. Also depressive, hypomanic, and manic episodes were associated with peer victimization and more negative qualities in friendship. Hunt, Eisenberg, & Kilbourne (2010) found that 5 psychiatric diagnoses were positively and significantly associated with failure to graduate college; bipolar I disorder, marijuana use disorder, amphetamine use disorder, cocaine use disorder, and antisocial personality disorder. Bae et al. (2013) looked at the general prevalence of bipolar disorder in a Korean sample of college students. They found a prevalence rate of 18.6%, and that bipolar disorder is more prevalent in rural dwelling subjects. They also found relationships between bipolar disorder and age, gender, and socioeconomic status. Hussain, Guppy, Robertson, & Temple (2013) examined the mental health of rural Australian undergrads and their opinions on access to health and support services. On average, students reported at least two health conditions in the past 6 months. The most commonly reported conditions were fatigue (56%), frequent headaches (26%) and allergies (24%). Reported mental health problems included anxiety (25%), coping difficulties (19.7%) and diagnosed depression (8%). Also 82% of participants reported sufficient access to support services. McAllister et al. (2014) looked at Australian staff member's experiences providing support to college students with express mental health concerns. Themes found included factors that facilitate initiation of staff support, barriers to providing support, challenges facing staff, and how universities support students with mental health challenges. Factors that facilitate initiation of staff support included the student coming forward with their problem; the students understanding that stigmas have

over all decreased in the area of mental health; and students on campus having more access and general proximity to those who can help provide supports. Barriers to the initiation to staff support included the non-disclosure of mental health problem from students, difficulty in targeting students who haven't disclosed their mental health problem, and previously unsuccessful experiences trying to obtain supports from staff. Challenges facing the staff included the emotional cost of providing supports, confidentiality issues, and having time in their schedules to attend to the mental health needs of the students they are trying to help. Some identified ways that these Australian universities support their students with mental health difficulties include free counseling and disability services, however the different aspects of these services (face-to-face counseling with no weekend or evening times or phone services with different therapists each time and less relationship building) present different barriers to different participants. Schindler & Kientz (2013) found an average of 9.8 supports to higher education and an average of 4.8 barriers to higher education for students with mental illnesses. Quantitative data reflected both internal and external supports for the participants to attend college, while qualitative data reflected mostly external supports. Barriers to both education and employment were primarily internal, such as fears, anxieties, lost motivation and difficulty concentrating. Sung & Puskar (2006) found that the themes that surround the lives of Korean college students with schizophrenia include the experiences of school life, interactions with family, interactions with friends, a mental illness, everyday life, and social role performance. Participants Experiences of school life were described through various difficulties in their academic performance. They had to miss school due to a relapse of their symptoms. Participants reported difficulties with

concentrating on their studies, comprehending lectures, and taking tests. Experiences involving Interactions with family including Verbal interaction deficiency as the most commonly reported experience, followed by conflict with family, support of family, and contact deficiency with family. Interactions with friends were characterized through loneliness in interaction with friends being reported most, then difficulty in making friends, withdrawal from friends, feeling comfortable with friends, and seeking intimacy was reported the least. Participant's experiences with mental illness focused on themes of resisting taking medications because they made them sleepy, gain weight, feel miserable, be dull, and lose physical energy; They also reported difficulty accepting having a mental illness and encountered a loss of self-confidence. Some could not do something they wanted to do. Some reported their illness was an obstruction to their marriage, and others felt as if they were falling behind the rest of the world, while 2 saw only darkness in their future. Their Experiences of everyday life were shown through expression of loss of interest and a loss of feeling of reality, and experiences with social role performance were expressed through experiences being fired from and quitting jobs, but also through experiences of enhanced self-esteem.

CHAPTER II: EXPERIENCES OF NON-TRADITIONAL FEMALE COLLEGE STUDENTS WITH BIPOLAR DISORDER

Introduction

In 2013, 65.9% of high school graduates of that year were enrolled in college or university in the United States (Bureau of Labor Statistics, 2014). The National Institute of Mental Health (NIMH) reports that an average of 2.6% of adults in the U.S. are diagnosed with bipolar disorder (2012). The NIMH defines bipolar disorder as “a brain disorder that causes unusual shifts in mood, energy, activity levels, and the ability to carry out day-to-day tasks” with severe symptoms that interfere with relationships, school and job performance, and can lead to suicide (2012, para.1). Given that an average of 2.6% of adults in the United States are diagnosed with bipolar disorder (NIMH, 2012), it is likely that there are current college students living with this diagnosis.

Symptoms of bipolar disorder include intense emotional states referred to as “mood episodes.” The person’s behavior during this time is extremely different compared to their normal or typical behavior. These mood episodes are referred to as manic episodes, depressive episodes, and mixed episodes. Figure 1 lists the National Institute for Mental Health’s identified symptoms of depressive and manic episodes. Someone experiencing a mixed episode shows symptoms from both a manic and depressive episode (NIMH, 2012). Considering the symptoms that accompany a diagnosis of bipolar disorder, it is understandable that a college student with this diagnosis would have a different experience than a healthy college student.

Symptoms of mood episodes	
<i>Symptoms of mania or a manic episode include:</i>	<i>Symptoms of depression or a depressive episode include:</i>
<p>Mood Changes</p> <ul style="list-style-type: none"> • An overly long period of feeling "high," or an overly happy or outgoing mood • Extreme irritability. <p>Behavioral Changes</p> <ul style="list-style-type: none"> • Talking very fast, jumping from one idea to another, having racing thoughts • Being unusually distracted • Increasing activities, such as taking on multiple new projects • Being overly restless • Sleeping little or not being tired • Having an unrealistic belief in your abilities • Behaving impulsively and engaging in pleasurable, high-risk behaviors. 	<p>Mood Changes</p> <ul style="list-style-type: none"> • An overly long period of feeling sad or hopeless • Loss of interest in activities once enjoyed, including sex. <p>Behavioral Changes</p> <ul style="list-style-type: none"> • Feeling overly tired or "slowed down" • Having problems concentrating, remembering, and making decisions • Being restless or irritable • Changing eating, sleeping, or other habits • Thinking of death or suicide, or attempting suicide.
<p><i>Source:</i> National Institute for Mental Health. (2012). Bipolar Disorder Among Adults. Retrieved March 16, 2015 from http://www.nimh.nih.gov/health/statistics/prevalence/bipolar-disorder-among-adults.shtml</p>	

Figure 10. Symptoms of Mood Episodes

Blanco et al. (2008) found that overall psychiatric disorder rates were no different between those attending and not attending college, but bipolar disorder was less common in the college-attending cohort. Mojtabai et al. (2015) looked at the long-term effects of a mental disorder on educational attainment. Students who had externalizing disorders and bipolar disorder, or fear, anxiety-misery and externalizing disorders diagnosed after base line data collection were found to have lower odds of high school graduation. Participants with bipolar disorder with onset after baseline, were found to be less likely to graduate college. Overall, participants with bipolar disorder were found to be less likely to attend college all together. Researchers found that “mental disorders accounted for 5.8–11.0 % of high school and 3.2–11.4 % of college non-completion,” (p. 1).

Nunes et al. (2015) looked at the access that Canadian college students have to prescription medication, psychotherapy, and counseling services. It was found that

students with private health insurance through their school could probably afford a year's supply of prescription medication for disorders like anxiety and depression. However, psychotherapy was only covered in 69% of university and 28% of college health plans, and overall very few plans provide enough coverage to comprehensively treat common mental health problems. Nusslock, Abramson, Harmon-Jones, Alloy, & Hogan (2007) found that in students with soft bipolar disorder (i.e., cyclothymia, bipolar II disorder), the preparation for and completion of final exams in higher education correlated with an increase in hypomanic episodes and symptoms.

Patel, DelBello, & Strakowski (2006) found differences in the presentation of symptoms in adolescents of different races and ethnicities. African-American youths were more often diagnosed with psychotic features with higher auditory hallucination ratings. Siegel, Freeman, La Greca, & Youngstrom (2015) found that adolescents with bipolar disorder reported significantly fewer qualities in a close friendship, including both positive and negative qualities. Positive qualities included more intimacy and engagement reported, while negative qualities included higher reported levels of conflict for varying reasons. In addition, depressive, hypomanic, and manic episodes were associated with peer victimization and more negative qualities in friendship.

Hunt, Eisenberg, & Kilbourne (2010) found that 5 psychiatric diagnoses were positively and significantly associated with failure to graduate college. These diagnoses included: bipolar I disorder, marijuana use disorder, amphetamine use disorder, cocaine use disorder, and antisocial personality disorder. Bae et al. (2013) looked at the general prevalence of bipolar disorder in a Korean sample of college students. They found a prevalence rate of 18.6% and that bipolar disorder is more prevalent in rural dwelling

subjects. They also found relationships between bipolar disorder and age, gender, and socioeconomic status. Hussain, Guppy, Robertson, & Temple (2013) examined the mental health of rural Australian undergrads and their opinions on access to health and support services. On average, students reported at least two health conditions in the past 6 months. The most commonly reported conditions were fatigue (56%), frequent headaches (26%) and allergies (24%). Reported mental health problems included anxiety (25%), coping difficulties (19.7%) and diagnosed depression (8%). Also 82% of participants reported sufficient access to support services.

McAllister et al. (2014) looked at Australian staff members' experiences providing support to college students who express mental health concerns. Themes found included: factors that facilitate initiation of staff support, barriers to providing support, challenges facing staff, and how universities support students with mental health challenges. Factors that facilitate initiation of staff support included: the student coming forward with their problem; the student's understanding that stigmas have overall decreased in the area of mental health; and students on campus having more access and general proximity to those who can help provide supports. Barriers to the initiation of staff support included the non-disclosure of mental health problems from students, difficulty in targeting students who haven't disclosed their mental health problem, and previously unsuccessful experiences trying to obtain supports from staff. Challenges facing the staff included the emotional cost of providing supports, confidentiality issues, and having time in their schedules to attend to the mental health needs of the students they were trying to help. Some identified ways that these Australian universities support their students with mental health difficulties include free counseling and disability

services. However, the different aspects of these services (face-to-face counseling with no weekend or evening times or phone services with different therapists each time resulting in less relationship building) present different barriers to different participants.

Schindler & Kientz (2013) found an average of 9.8 supports to higher education and an average of 4.8 barriers to higher education for students with mental illnesses. Quantitative data reflected both internal and external supports for the participants to attend college, while qualitative data reflected mostly external supports. Barriers to both education and employment were primarily internal, such as fears, anxieties, lost motivation and difficulty concentrating. Sung & Puskar (2006) found that the themes that surround the lives of Korean college students with schizophrenia include the experiences of school life, interactions with family, interactions with friends, a mental illness, everyday life, and social role performance. Participants' experiences of school life were described through various difficulties in their academic performance. They had to miss school due to a relapse of their symptoms. Participants reported difficulties with concentrating on their studies, comprehending lectures, and taking tests. Experiences involving interactions with family, including verbal interaction deficiency, was the most commonly reported experience followed by conflict with family, support of family, and contact deficiency with family. Interactions with friends were characterized through loneliness in interaction with friends being reported most, then difficulty in making friends, withdrawal from friends, feeling comfortable with friends, and seeking intimacy was reported the least. Participants' experiences with mental illness focused on themes of resisting taking medications because they made them sleepy, gain weight, feel miserable, be dull, and lose physical energy. They also reported difficulty accepting their

mental illness and encountered a loss of self-confidence. Some could not do things they wanted to do. While some reported their illness was an obstruction to their marriage and felt as if they were falling behind the rest of the world, others saw only darkness in their future. Their experiences of everyday life were shown through expression of loss of interest and a loss of feeling of reality. Experiences with social role performance were expressed through experiences being fired from and quitting jobs, but also through experiences of enhanced self-esteem.

The purpose of this qualitative study was to understand the experiences of United States college students with a bipolar disorder diagnoses at a southern university. This study will allow practitioners to have a better understanding of what barriers these students might face, as well as what supports they could benefit from during this time in their life. This study could also help to inform practitioners of what it is like to navigate the world of higher education with a mental illness and help occupational therapists to continue client-centered care to this population in an educated and informed way.

Methods

Participants

Participants were recruited through an e-mail script sent on behalf of the primary researcher. To protect identities, the Office of Services for Individuals with Disabilities (OSID) at the university compiled a list of students who used a diagnosis of bipolar disorder to obtain accommodations. The primary researcher compiled a script that included information on the study, confidentiality, potential reimbursement, and how and what research would be conducted through 1-2 hour long, in-depth interviews. Potential

participants were asked to contact the primary investigator via e-mail or cell phone. The inclusion criteria at this time was having a diagnosis of any type of bipolar disorder, being enrolled as a full-time student, being their own guardian, being over the age of 18, and taking at least half of their credit hours on campus (as opposed to online). Exclusion criteria included if the participant was in an acute phase (manic or depressive episode) of their condition or if the participant was taking all online classes. When the e-mail script was first sent, two participants volunteered for the study. The inclusion criteria were adjusted on the approved IRB proposal to include the third participant. This participant was already a doctorate and had attended both undergraduate and graduate school on a college campus. She is now enrolled at the southern university for an online graduate certificate to better inform her current working position. Although she did not fit the primary inclusion and exclusion criteria, it was judged by the primary researcher and her research advisor that this participant's experience and willingness to participate warranted changing the criteria for better research collection. Thus the inclusion criteria were changed to include students who were enrolled in on-line graduate level classes. The e-mail script was sent out again later in the semester when more students had been identified as current students with bipolar disorder.

Monica is a 49-year-old female who has already obtained an undergraduate degree as well as her doctorate. She was born in the Dominican Republic, and moved to Puerto Rico at 4 years old. When she was 12, her parents divorced, and she moved back to the Dominican Republic. She graduated high school at 16 years old with honors. At 18 years old, she moved to Puerto Rico to join the U.S military. There, she had her first bipolar breakdown at basic training. She then moved to New York to live with her aunt

and uncle and receive treatment, because her father and stepmother could no longer help her symptoms. In New York, it was hard for her to get the proper diagnosis due to language barriers. She was originally diagnosed with schizophrenia and was put on lithium for years. This led to her being unstable until she was properly diagnosed. From then on, she learned to be functional while receiving treatment and starting her family in New York. She was able to obtain a computer science degree while going through hospitalizations for her disorder. She worked as a telecommunication engineer and was in the U.S. Army Reserve for eight years. She was a first responder on 9/11 at Ground Zero and now suffers from PTSD and breathing disorders as comorbid conditions to her bipolar disorder. In 2007, she moved to Florida and has lived there since. She has been divorced twice. Her third husband left her a widow while she was completing her doctorate program. She has three children and works as a nurse practitioner. Now she is hoping to receive a psychiatric nurse practitioner certification from the college she is currently enrolled in.

Rachel is a 29-year-old female who is currently an office worker, college student, and the single mother to one young son. This participant has been dealing with symptoms of emotional and behavioral disturbances since a young age and had been given a variety of diagnoses before her current diagnosis of borderline bipolar disorder and severe mood disorder. She was diagnosed with ADHD at about 5 years old and reports that several times during her childhood she was sent to psychiatric hospitals to receive further evaluations. At one point, she was diagnosed with a chemical imbalance and stated that this developed into bipolar disorder as she grew into a teenager. She graduated high school in 2004 and immediately began college. At one point she dropped

out for several semesters, because she felt that she was not focused enough to attend school. Also, in 2006 her mother had a stroke and her father was deployed to Iraq, so she did not return to school in order to help care for her mother. She started school again in 2010 and has had a 3.0 GPA since returning to school. She moved away from her ailing mother and now lives with her aunt and cousin in order to get away from an abusive relationship. Her son is 7 years old, and she attributes wanting to be a good role model and having a better understanding how to manage her bipolar disorder as major reasons why she is doing so well at this point in her school career.

Hannah is a 35-year-old female with 3 children. She was diagnosed with bipolar disorder when she was 23 years old. She began going to school, but she became involved with a man who she reports made her drop out. She was married and had her first child in 2001, and when her child was 6-weeks old her husband left her. She felt that she was struggling with post-partum depression, and she tried to go back to school but was not able to keep up. She dropped out of school for the second time, and in 2003 she was admitted into a psychiatric hospital after a mental breakdown where she was diagnosed with bipolar disorder. Since 2003, she has remarried and has had two more children. She had a plan that when her youngest child went to kindergarten she would go back to school. She has battled to find the correct medication regimen that works for her, and she feels that she is now on the correct medications for her. She is currently attending university for a degree in general education.

Qualitative Cross-Case Analysis

Qualitative cross-case analysis is the process of finding similarities and differences in the separate cases of individuals. Analyzing more than one case allows the researcher to get a broader picture of what it is like to be a participant who qualifies for

the study. Having multiple stories to compare and contrast shows where there are similarities in stories and experiences and what aspects are unique to each case. This allows new questions to arise and a better sense of saturation to emerge from the data collected (Khan & VanWynsberghe, 2008). Each case is first coded individually, and then the codes from the cases are combined. All of the codes are then separated into categories or secondary codes. These secondary codes are used to see the more prominent themes that arise from the data. This study used two interviews to develop themes, and then the data from a third interview was used to verify the themes that emerged to help see what was unique to each participant individually and what aspects could be considered more generalizable to people who are similar to these participants.

Data Collection

Data for this study was collected through in-depth, detailed interviews with the volunteers. Volunteers were students at the southern university and were therefore asked to meet the primary researcher somewhere on campus that they were comfortable with to conduct the interview. The 1st participant, who is currently enrolled online, participated in an interview over the phone. These interviews were based on questions developed through the primary researcher's college experience. During the interview these questions were changed, added to, and modified to help clarify the specific participant's individual lived experience.

Pre-formulated Questions Examining the Impact of Bipolar Disorder on the College Experience

1. To begin, please tell me about yourself including your history with higher education and your history with bipolar disorder?
2. When choosing where to go to college (or to remain/leave college upon diagnosis), how did having bipolar disorder factor into your decision?
3. How did your diagnosis influence your decision on where you would live during your college experience?
4. What is it like to attend classes while experiencing various symptoms of bipolar disorder?
5. How do you choose which professors to tell about your diagnosis? How do you go about this?
6. How do you choose which friends to tell about your diagnosis?
7. Is there anyone who you do not tell about having bipolar disorder?
8. Do you have a way of deciding who to tell and who not to tell?
9. What activities do you participate in on-campus? How does having bipolar disorder impact your choice to participate in these activities?
10. Are there any activities that you can think of that you would like to participate in that are on campus, but you feel having bipolar disorder stops you from doing so?
11. Can you think of any supports to your experience in college life that allow you to continue with your education if or when you experience difficulties with having bipolar disorder?

Figure 11. Pre-formulated Questions Examining the Impact of Bipolar Disorder on the College Experience

12. Do you have a way of deciding who to tell and who not to tell?
13. What activities do you participate in on-campus? How does having bipolar disorder impact your choice to participate in these activities?
14. Are there any activities that you can think of that you would like to participate in that are on campus, but you feel having bipolar disorder stops you from doing so?
15. Can you think of any supports to your experience in college life that allow you to continue with your education if or when you experience difficulties with having bipolar disorder?
16. Can you think of barriers you experience in your college life that make it more difficult for you to continue with your education if or when you experience difficulties with having bipolar disorder?
17. If you don't mind sharing, how has your diagnosis had an impact on your grades and/or overall education?
18. Do you have any last comments on how college life could be changed for the better for not only yourself but also for other students who may have a diagnosis of bipolar disorder?

Figure 11. (Continued)

Data Analysis

First, the interviews with Monica and Rachel were transcribed verbatim. These transcripts were then coded. This resulted in 249 codes for Monica's interview, and 143 codes for Rachel's interview. These codes were then separated into approximately 27 secondary codes. These secondary codes were examined and worked into categories, which led to the formation of three primary themes that arose from the data. This data

analysis was done through the use of the HyperTRANSCRIBE and HyperRESEARCH computer programs, which helped keep data organized and clear.

Hannah was interviewed later. Her interview was also transcribed verbatim. This transcript was then coded and categorized into new and existing secondary codes. The 3rd interview yielded 131 codes and no additional secondary codes. Once this was completed, all secondary codes from all three interviews were again condensed from 34 secondary codes into categories. These categories were then compared to the original categories from the analysis of the first 2 interviews and then compared to the three original themes from the first two interviews' analysis. It was found that the third interview held true to the same primary categories and themes as the first 2 interviews. The 3rd interview with Hannah and her experiences helped to bring the data toward saturation as well as bringing more understanding to the main themes and how these themes impacted these women's lives during college and other aspects of life.

Results

Themes

Supports: The theme of 'supports' was characterized by secondary codes including 'family support systems', 'co-worker support systems', 'religious support systems', 'Having accommodations in line', 'medication and treatment', and 'things that could help students'. As for 'family support systems', Monica had been sent to live with her aunt and uncle in New York at a young age when she had her first mood episode. Her family in New York was not only better able to financially support her, but they also had access to better care than her mother and father in her native South American country. Rachel lives with her aunt and teenage cousin, both of who help her with rides

and taking care of her son. Hannah did not think that her own family was good for her mental health, so she moved closer to her current husband and his family to have support with her children. The first two participants worked with people who worked in fields that require confidentiality, so the participants felt comfortable with telling coworkers about their diagnosis. This allowed them to have outlets through work that enabled them to share feelings with people other than family members. These relationships were deemed especially meaningful during times when there was turmoil at home. Hannah did not share her illness with those whom she worked with, but she did have a support system through the pastor at her church whom she recently told when she was going through a hard time.

Accommodations are a very important support to the participants. All three acknowledged that having extra time for assignments when they had particularly bad mood episodes helped them to stay on track. They also felt that extra time on tests and assignments was not often used, but they were happy to know it was there if needed. Hannah was on a medication that impacted her memory, and she used the extra time on tests more often due to this side effect. All three participants spoke about the importance of completing assignments on time in order to keep up with classes in general, but extended time was useful when they needed extra help with understanding the specific material or if they had been having a difficult time while attending to one assignment. All 3 participants spoke to the difficulty they had in finding out that they qualified for accommodations. Monica went to college before accommodations were legally required to be given to students with disabilities. She did not find out that she qualified for accommodations until after they were already available. She was told she was eligible

for accommodations by her doctor, not by anyone she knew through her school. Rachel did not know about accommodations available to her until she returned for school for the 2nd time, and Hannah did not know about accommodations available until her recent suicide attempt. Hannah’s doctor told her to apply for accommodations, although she had read the current disability statement printed in every class’ syllabus at the start of the semester and did not feel that she qualified.

Disability Statement
<p>“A student with a “disability” may be an individual with a physical or mental impairment that substantially limits one or more major life activities such as learning, seeing or hearing. Additionally, pregnancy or a related medical condition that causes a similar substantial limitation may also be considered a disability under the ADA. If you are registered with the Office of Services for Individuals with Disabilities, please obtain your accommodation letters from the OSID and present them to the course instructor to discuss any academic accommodations you need. If you believe you need accommodation and are not registered with the OSID, please contact...[contact information redacted]. Upon individual request, this syllabus can be made available in an alternative format”.</p>
Retrieved from a syllabus of the southern university attended by the participants

Figure 12. Disability Statement

‘Medication and treatment’ was a significant support for participants when they were able to get the right mix of drugs and treatments to treat their specific conditions. Monica had a hard time being diagnosed, and in 2006 she was able to get a Vagus Nerve Stimulator to help combat her crippling depressive symptoms. She says that this has made one of the biggest differences in her life. She also says that being successful in

school has allowed her to have a strong foundation for feeling proud of herself and this helps her battle her depression. Rachel changes medication often when she stops responding to her current prescription. She says that taking her medication as prescribed, even when she is feeling good and has a tendency to believe she doesn't need it, helps her to continue a specific treatment for a longer period of time and have better results. She has also been going to a psychologist lately and thinks that this may help her in the long run. Hannah has been put on a new medication in the past couple years that she describes as a "miracle" drug, and this has helped her to remain steady for the most part for the past few years. She also knows that if she stops taking her prescribed medication for even 2 or 3 days, she may lose control and attempt suicide like she did 4 months before her interview.

Another category that supported the theme of supports was things that participants suggested that would help students like themselves do better in school. For example, Hannah pointed out that she did not feel she qualified for accommodations based on the statement that is included in every class' syllabus. This led to the suggestion that this statement be modified to help students understand the scope of diagnoses that could qualify a student get help in school in order to succeed. Rachel states that smaller class sizes would help someone like her, because she previously went to a school with smaller classes and she felt that she did not need to ask for accommodations there. Monica suggests that students should have access to intervention services on campus that could help them maintain their medication management and cope with stressors that can come with the expectations of being a college level student.

Supports			
Categories	<i>Monica</i>	<i>Rachel</i>	<i>Hannah</i>
Medication and Treatment	<p>“I got a Vagus Nerve Stimulator”</p> <p>“School is my Therapy”</p>	<p>“I began taking my medication regularly as prescribed”</p>	<p>“Cause I know I can't go without my medicine, because if not I'll go into the depression.”</p> <p>Therapist as Support</p>
Family Support Systems	<p>Has always had a “home base” near family</p>	<p>“My major support would have to be my aunt”</p>	
Co-worker Support Systems Pastor Support	<p>“They'll talk to me until I cry it out and I feel better”</p>	<p>Coworkers brought me to counseling</p>	<p>“Mom and preacher are big support systems”</p>
“Have accommodations in line”	<p>“Just knowing that it is there makes me feel much better”</p>	<p>I have accommodations now</p>	<p>Medication affects memory</p>
Mania as support	<p>“When I'm not manic I struggle”</p>	<p>N/A</p>	<p>“I was kind of manic I was on a big cleaning kick”</p>

Figure 13. Supports

Things that could help students	School could have intervention to help students	“a closer relationship to students in my class”	Add to disability statement
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Figure 13. (Continued)

Obstacles: The second theme that emerged from the data was the theme of obstacles. Categories of ‘stigma and judgment’, ‘suicidal thoughts and action/suicide’, ‘difficult to diagnose and treat’, and ‘not helpful to student success’ were what led to this theme of obstacles. In terms of ‘stigma and judgment’, all 3 participants were afraid of being judged due to having a mental health diagnosis; however, none of them could tell a story of a specific time they had felt judged or discriminated against because of their diagnosis. Overall, all 3 participants seemed to be afraid that their abilities and thought processes would be underestimated or overlooked by those who knew about the diagnosis but did not know the person who has the diagnosis well. The category of suicide was made up of stories from all 3 participants about trying to commit suicide at least once in their life. Monica can remember trying at a young teenager taking a handful of pills because she was depressed at the time. Rachel spoke about “always overdosing on pills” as her escape route when things became too much for her to handle over the course of her adult life. Hannah tried to commit suicide only 4 month before her interview for this study by overdosing on pills. She attributes this behavior to forgetting her medication while on a weekend trip and not being able to stay stable without it.

While medication and treatment were a support for these participants, having their conditions diagnosed and treated was an obstacle. Monica had to contend with a

language barrier when she first came to the United States, which resulted in her being diagnosed and treated for schizophrenia for a period of time. This treatment caused other side effects such as extensive weight gain, which led her to feel more depressed. She was able to get her symptoms under control and lead what she felt was a stable life until she acquired PTSD after being a first responder in New York during the 9/11 terrorist attacks. A few years after that, she had a crippling depressive episode while on a plane with her daughter going overseas to attend a sports competition. She struggled with severe depression for some time until she was able to get the Vagus Nerve Stimulator. However, her insurance no longer covers this device. Soon she will need to get the battery replaced, and she is having some anxiety over whether her insurance will cover the new battery. Rachel had difficulty with changing diagnoses from a young age, and in adulthood she has struggled with being put on medications that give her side effects such as hallucinations and paranoid thoughts. The difficulty that she faces is that when she experiences these side effects, it is difficult for her to schedule an immediate appointment with her doctor. This leaves her with the options of either continuing to take the medication and cope with the side effects, or stop the medication and go without treatment until she can see her doctor again. She does say that when the symptoms are bad enough, she will stop taking the medicine altogether. Hannah is currently on a prescription that she believes is helping her more than anything she has taken in the past, but she also struggled with getting her symptoms diagnosed and under control. She believed that she had post-partum depression, before being admitted to a psychiatric hospital and being diagnosed with bipolar disorder while she was there. She states that she has been on everything in an attempt to control her symptoms, and at times this

meant being on 12 different medications at once. She felt like she was a “walking pharmacy”, and says that her current regimen of 4 prescriptions helps her to keep track of taking what she needs when she needs it. She also acknowledges that there are times when she feels that she is “good” and does not need her medication, but having a smaller number of medications makes it easier for her to maintain her medication schedule and stay on track.

The participants also spoke about the aspects of their lives that do not help them to be a successful college student. For example, Monica spoke about how she is trying to be a functional mom inside of a functional family. When she is worried that one of her children may be exhibiting the early signs of bipolar disorder, it is hard for her to focus on her school responsibilities. Rachel directly blamed her symptoms for contributing to her not being able to pay attention during classes when she was previously enrolled in college. Hannah corroborates Rachel’s thoughts that bipolar symptoms are not helpful to their school success. Hannah says that her thoughts race, especially during classes she is less interested in or material that is harder for her to grasp.

Obstacles			
Categories	<i>Monica</i>	<i>Rachel</i>	<i>Hannah</i>
Stigma and judgment	“People are going to doubt my abilities”	“I find myself secluding myself from other people because I know that I am different”	“I didn’t want people to assume I’m crazy”

Figure 14. Obstacles

Suicidal Thoughts and Actions/ Overdosing	“I always remember being depressed at a young age, and I remember taking pills and trying to kill myself”	“Always overdosing on pills”	Tried to commit suicide 4 months ago
Difficult to Diagnose and Treat	“They didn’t know what it was”	“I just felt stuff crawling on me”	“Bipolar people get on these kicks where they don’t think they need their medicine”
Not helpful to school success	“I’m struggling to be a functional mom in a functional family”	“A lot of lacking in focus”	Can’t pay attention when thoughts are racing

Figure 14. (Continued)

“It’s part of who I am”: The third theme found throughout all 3 participants’ interviews focuses on the fact that bipolar disorder has contributed to who they are as people at this stage in their life. This also speaks to how the diagnosis has led to them making certain life choices. The first category of this theme is “At the beginning it is just about accepting it”. Monica stresses that everyone has things going on in their life, and this diagnosis is just her personal struggle. She also acknowledges that she is not the only person who has bipolar disorder and that it is okay to struggle with it at times.

Rachel specifically spoke about how accepting that she had bipolar disorder, taking the time to straighten out her medications, and then maintaining her medication schedule was the best thing that could have happened to her. Hannah says “it is what it is” and understands that this is just a part of her life, and that managing this part of her life will lead to her being able to better manage other parts of her life such as her relationship with her family.

All 3 participants also spoke about their grades in school and how this is impacted by their diagnosis. Monica has always had very good grades since she was a child. She actually attributes her manic tendencies to why she has always been able to keep her grades so high. Rachel has maintained a 3.0 GPA or better since starting school at the southern university, and says that she attributes this to finally having her symptoms under control and wanting to be a good role model for her son. Hannah is in her first semester of college since returning, but says she has good grades so far. She does admit that her grades suffered at first when she was still getting over her suicide attempt. She has now added a psychotherapist to her treatment regimen and feels that this has helped her to maintain her stability. All 3 participants also spoke about how school is having a positive influence on their well-being. Monica says that school is her therapy; it helps her to feel successful and inhibits her depression. Rachel spoke about how much she loves school, because it makes her feel successful and feel that she is doing what is best for herself and her son. Hannah was bored in her life after sending her youngest child to kindergarten and feels that school is a constructive way to fill her time and help her to get a better, more fulfilling job in her future.

Part of what makes these individuals non-traditional student is that they do not participate in on-campus events often. None of the participants lived on campus at any time. All 3 indicated that they never really had any interest in on-campus events; and now that they are older learners with families, they have more important things to be doing at home. The participants also have all acknowledged that their diagnosis has influenced where they have lived at one time or another. Monica moved to New York when she was 18 to live with her aunt and uncle in order to get better treatment for her symptoms that her dad and step-mother had a difficult time understanding and helping with was involved in a difficult relationship while living with her mother. This resulted in the man not being able to leave her alone and her doing things that could get her in trouble with the law due to her symptoms and difficulty controlling them. This led to her moving to live with her aunt and cousin, so she could start fresh and begin school without the continued drama from a tumultuous relationship. Hannah was not managing well while living in Indiana near her father. She said that moving to Kentucky made her allowed her to get the care she needed and to form a relationship with her now husband, both of which helped her to stay stable.

The most important category to this theme is ‘it’s part of who I am’. All 3 participants were able to talk about their struggles with their diagnosis, but all 3 felt that being bipolar made them who they are today. Monica not only attributes her manic side to help her maintain high grades, but she believes it encourages her to always have a goal. Her current long-term goal is to become a psychologist, and she feels that her continued success in school could help make this happen. Rachel knows that she will always have struggles that come along with her diagnosis, but she also knows that nothing will stop

her from doing what she wants to do. This is especially true now that she feels she is stable and able to focus her energy on receiving a degree and getting a job that will help her raise her family. Hannah knows she is not the only person who suffers from bipolar disorder, and that it is simply a struggle that she must deal with as part of the life she lives. Overall, none of the participants would take away their disorder. When they are in control of their symptoms and able to maintain their medication regimen, they can do anything they set their minds to.

<i>"It's part of who I am"</i>			
Categories	<i>Monica</i>	<i>Rachel</i>	<i>Hannah</i>
"At the beginning it's just about accepting it"	"Because you're not different you know"	"Extra attention to get my medication straightened out was the best thing that could ever happen to me"	"It is what it is"
Grades	Good Grades	"3.0 ever since" starting school	"I have good grades so far"
School is my Therapy	"School is my therapy"	"I love school"	"I decided to come back to school... a lot of it was boredom"

Figure 15. "It's part of who I am"

I stay away from campus	I never lived on campus	“Everyone is so young and childish”	“I’ve never really been one to participate in stuff on campus”
Living where I live because	I lived in New York most of my life to be around my family to secure my children	“He came by and was looking for me after I moved”	Moving was the best thing she could have done She wasn’t managing well at all
“It’s part of who I am”	“...I always have a goal”	Nothing is going to stop me	“I know I’m not the only one who suffers with it”

Figure 15. (continued)

Discussion

Person-Environment-Occupation Model of Practice

A concise description of the Person-Environment-Occupation Model (PEO) is “Occupational performance results from the dynamic relationship between people, their occupations and roles, and the environments in which they live, work, and play” (Law et al., 1996). It is the idea that the way humans perform is based on how their personal factors lead to the occupations that one chooses to engage in and how the environment can impact this. Occupational performance is a person’s ability to adequately perform

the required activities, tasks, and roles of living involving the dynamic relationship between the person, context, and the activity (Radomski & Trombly Latham, 2014).

The person component is made up of individual client factors, performance skills, and performance patterns as outlined in the Occupational Therapy Practice Framework (American Occupational Therapy Association, 2014). Part of the person component for these participants was the idea that in order to function successfully with bipolar disorder, the first thing someone would need to do is accept it. Part of this infers the person has to accept that treatment and symptoms are ongoing and will never truly go away. Two of these participants spoke about bipolar disorder just being a part of who they are as a person, and that that is okay but the disorder needs to be continuously monitored. As a result, this makes managing bipolar disorder not only a part of who they are but also daily occupation for them within the environment in which they live and go to school in. In this study, medication was shown to be a way to change the person component in a way that would help the participants to be better able to engage in their preferred occupations.

As for the environment component, having supportive people around helped these participants. Since all three participants are mothers, a strong support system helped them to engage in the college experience while feeling secure in that there was someone nearby to help with their children in the event that one of them is no longer stable. Rachel lives with her aunt, Monica lived near her mother's family (including an aunt and uncle), and Hannah lives with her husband. These are examples of how the physical and social environments can contribute to someone's successful occupational performance by decreasing negative personal factors such as anxiety of taking care of children. There is also the example of the school environment helping influence successful occupational

performance. All 3 participants said that they do not always need their accommodations stating they all do their best to turn assignments in on time. However, having a supportive school environment that can give access to tutoring, extended time, or quiet testing environments can also help to limit anxiety and stress and help facilitate better performance and better grades.

For the occupation component of the PEO model, the combination of the person components along with the supportive environments these participants described help them successfully participate in the occupation of attending college. The occupations of these participants did not need changed the way the person and environment components needed to change in order to improve occupational performance. Overall, the participants wanted to engage in the occupations related to being a college student, and in order to be successful in this they had to be in supportive environments which included accommodations to occupations of college and to control their person component through medication and treatment.

Compared to Previous Research

One article by Schindler & Kientz (2013) found that many barriers to higher education are internal, including fears and anxieties, lost motivation, and trouble concentrating. In addition, this article found that students cited more supports than barriers; the average number of supports for higher education was found to be 9.8 while the average number of barriers to higher education was 4.8. The participants of the current study all cited fear and anxiety over being judged for their diagnoses, which is internal considering that none of them have had an truly concrete, memorable experience being judged for their diagnosis. The idea of having more supports than barriers was also

true for the participants of the present study. It appeared that participants in the current study had an easier time naming things that helped them to succeed than they did pointing out barriers, which could help to support the idea that there are more supports cited by individuals than barriers.

Mojtabai, Stuart, Hwang, Eaton, Sampson, & Kessler (2015) found that bipolar disorder onset after baseline resulted in lower odds of graduating college; and among non-students, baseline bipolar disorder resulted in lower odds of going to college. Baseline was in 1990-1992 and follow-up was in 2001-2003. Baseline was roughly the time at which these individuals were graduating high school and looking into college. The participants in the current study all went to college after graduating high school, but only one of the 3 has graduated. Two of the three participants in the present study were diagnosed prior to entering college, and one of them graduated. As for the participant who was diagnosed after beginning college, she has been unable to graduate thus far.

Sung and Puskar (2006) found that in Korean college students with schizophrenia, participants reported difficulties with concentrating on their studies, comprehending lectures, and taking tests. The participants in the current study also reflected that their symptoms can make it difficult to concentrate and that their minds can tend to wander during lectures. Sung and Puskar's participants also reported difficulty accepting having a mental illness and encountered a loss of self-confidence. The participants of the current study stressed the importance of accepting a mental health diagnosis on their ability to participate successfully in the occupation of attending college. A sign of lower self-confidence in the current study's participants could be the idea that they are all skeptical of how people will look at them if they know about their diagnosis; however all three

expressed, in some form, the idea that they can do anything and will not let their diagnosis hold them back.

Limitations

One limitation of this study was the similarity of the participants. All participants are female and mothers who have attended college more than once. These participants had similar support systems through their families and similar occupations such as being mothers to young children and working in addition to taking college classes. Lack of time was a serious barrier that this study faced that led to limitations in the number of participants and the amount of data that could be collected. Another limitation in this study is the fact that the participants found it to be exceptionally difficult to focus solely on college experiences. These women had so many experiences to talk about in their lives, from relationship difficulties to an experience as a first responder on 9/11 in New York City. A final limitation was the size of the study. More participants in a larger study may help to have a better delineate the effects of bipolar disorder from other life influences.

Trustworthiness

Various steps were taken in order to make this study trustworthy. First, member checking was completed with all 3 participants to assure that the themes discovered were in line with lives of these individuals. All three were agreeable to the three themes, and commented that the themes accurately summarized their experiences. The primary researcher of this study also collaborated with an experienced researcher who was a faculty member of the occupational therapy program. This experienced researcher helped to guide the cross-case analysis and decisions made during the course of the research.

The third interview itself was a way to increase the trustworthiness of the study. After the first two interviews were conducted, transcribed, coded, categorized, and then themed, a second e-mail recruitment was sent out. The third participant came forward to be interviewed. The primary researcher and the experienced researcher decided together that conducting a third interview would help to supplement or dispute the three major themes that were found in the first two interviews. Multiple interviews and perspectives help to make the findings of this study more generalizable to the women it represents, as well as helping to expand ideas for current research into this arena. Another technique used to make this study more trustworthy was the use of a reflexivity journal.

Implications for Practice

This study made it possible to identify that occupational therapy could actually be more present in the lives of college students with bipolar disorder. Monica believed that support groups and the “check-ups” would help keep these individuals stay on track in terms of managing stress and medications. There would probably need to be an increase in these activities on campus and the number of occupational therapists on campus in order to run the support groups and check-ins. Through this study, an occupational therapist who worked in the university’s disabilities office assisted in setting up the recruitment of selected individuals she worked with and sending the e-mail script out to potential participants. The participants said only good things about this occupational therapist, and they said she does anything she can to help them in their college experience. However right now it would not be possible for this occupational therapist’s workload to increase. She already does as much as she can for the students she has on her caseload, so that is where there is potential for another occupational therapist on

campus to run programs that would support students with mental health diagnoses and other conditions.

Occupational therapists who have clients with bipolar disorder can benefit from this study. Any client with bipolar disorder who is considering going to college needs help, and an occupational therapist could help the client obtain information on potential schools and how to apply for accommodations in that school's disabilities office. All three of these participants did not know about accommodations until after they had started school. Something that could be helpful without needing to send students to an OT or hiring more OTs on campus would be changing the disability statement that is required to be in every class' syllabus. One of the participants did not think she qualified for accommodations at the beginning of the school year, because the disability statement does not include a list of qualifying conditions. Although an all-inclusive list of diagnoses would be pages long and would not be practical to be added to class syllabi, a rewrite could be made that makes it more clear to students with varying diagnoses that they could qualify for assistance that would support them in their academics.

Conclusion:

In conclusion, the experiences of these individuals varied from the experience that would be considered typical by many high school and college students in the United States who are not diagnosed with a mental illness. They have each been in and out of the higher education system multiple times, with one participant being more successful than the other two in terms of degrees earned. This study found that mothers with bipolar disorder spend a long time learning to manage their condition, and management starts with acceptance and an understanding that bipolar symptoms and treatments are a part of

life with this diagnosis. There will always be obstacles, whether it is medication that stops having the same effect on the person or personal factors outside of college that increase stress and prevent successful occupational performance. However, certain supports make functioning with bipolar disorder possible. These include strong family, work, and church supports systems; medication and treatment management; accommodations; and individual perceptions of what can help students. Even with obstacles, strong supports make it possible for these participants to engage in the occupation of attending school. Having a bipolar disorder diagnosis is a part of life in the same way that other people have a unique mixture of problems. “It is what it is” said one participant, and all three participants voiced their opinions that having bipolar disorder throughout their lives makes them who they are today.

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APPENDIX A:
E-mail Letter of Recruitment

Appendix A: E-mail letter of Recruitment

Hello,

My name is Taylor Massie, and I'm a graduate student in the Occupational Therapy Program here at [University name]. You've been contacted through the Office of Services for Individuals with Disabilities on my behalf to request your participation in a study on the experience of progressing through college with Bipolar Disorder. [University occupational therapist] has sent this confidential e-mail to you for me. I will not know who you are until you contact me to provide your name and additional information. If you choose to participate, all of your information will be kept completely confidential.

In order to participate, you will be asked to partake in one or more interviews with me. I will ask you questions about the impact that Bipolar Disorder has had on your college experience. These interviews could last from 1-2 hours depending on how much you'd like to share with me. If you have any interest in sharing your story, you can e-mail me [e-mail address] or call me at [phone number]. Feel free to contact me if you would like more information about how the study will be conducted. Contacting me does not obligate you to participate. I am happy to share more information with you before you make your decision. Interviews will be held during the summer and/or Fall Semester of 2015, and must be completed at [University name]. You will be reimbursed for any gas expenses you may incur to get to campus. I look forward to hearing from you and discussing how your story can help other students be successful in college.

Thank you,

Taylor Massie, Occupational Therapy Student

APPENDIX B:

Informed Consent in Eastern Kentucky University Format

Appendix B: Informed consent in Eastern Kentucky University Format

Consent to Participate in a Research Study

Bipolar Disorder and the College Experience

Why am I being asked to participate in this research?

You are being invited to take part in a research study about having bipolar disorder during while attending college. You are being invited to participate in this research study because you were identified by the Office of Services for Students with Disabilities as having bipolar disorder. If you take part in this study, you will be one of about two to six people to do so.

Who is doing the study?

The person in charge of this study is Taylor Massie at Eastern Kentucky University. She is being guided in this research by Dr. MaryEllen Thompson of the Department of Occupational Science and Occupational Therapy. There may be other people on the research team assisting at different times during the study.

What is the purpose of the study?

The purpose of this study is to describe the lived experience of individuals with bipolar disorder as they navigate the world of higher education.

By doing this study, we hope to learn about the barriers, supports, and events you experienced in trying to begin, maintain, and finish your education.

Where is the study going to take place and how long will it last?

The research procedures will be conducted at Eastern Kentucky University. You will need to come to ECU 1 to 5 times during the study. Each of those visits will take about one to two hours, depending on how much information you are willing to share. The total amount of time you will be asked to volunteer for this study is one to ten hours over the next six months.

What will I be asked to do?

You be asked to come to Eastern Kentucky University to have an interview done with Taylor Massie. Questions will revolve around the roll that your condition had on how you made decisions about attending college, telling people about your condition, and your ability to obtain help when you needed it. You only need to share as much information as you feel comfortable sharing, and you do not need to agree to any follow-up interviews if you do not want to. You can stop participating at any time.

Are there reasons why I should not take part in this study?

Please do not volunteer for an interview if you feel you are entering an acute episode, manic or depressive, of your condition. You will not be allowed to be interviewed if you are under 18 years old, or if you take more than half of your credit hours through online classes.

What are the possible risks and discomforts?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

Although we have made every effort to minimize this, you may find some questions we ask you to be upsetting or stressful. If so, we can tell you about some people who may be able to help you with these

feelings. If you feel that you need help or support with your condition at any time during this study due to the questions being asked or any other life stressors, I strongly encourage you to call the Eastern Kentucky University Counseling Center at 859-622-1303

You may, however, experience a previously unknown risk or side effect.

Will I benefit from taking part in this study?

There is no guarantee that you will get any benefit from taking part in this study. However, some people have experienced relief when being able to freely speak about the struggles and benefits they have experienced while attending college. We cannot and do not guarantee that you will receive any benefits from this study.

Do I have to take part in this study?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

If I don't take part in this study, are there other choices?

If you do not want to be in the study, there are no other choices except to not take part in the study.

What will it cost me to participate?

You may have to pay for the cost of getting to the study site and a parking fee.

Will I receive any payment or rewards for taking part in the study?

You will receive travel and parking reimbursement for taking part in this study. If you should have to quit before the study is finished, the payment you receive will be based on the number of times you had to travel to Eastern Kentucky University for this study.

Who will see the information I give?

Your information will be combined with information from other people taking part in the study. When we write up the study to share it with other researchers, we will write about this combined information. You will not be identified in these written materials.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, your name will be kept separate from the information you give, and these two things will be stored in different places under lock and key.

However, there are some circumstances in which we may have to show your information to other people. For example, we may be required to show information that identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as Eastern Kentucky University.

Can my taking part in the study end early?

If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study.

The individuals conducting the study may need to end your participation in the study. They may do this if you are not able to follow the directions they give you, if they find that your being in the study is more risk than benefit to you, or if the agency funding the study decides to stop the study early for a variety of scientific reasons.

What happens if I get hurt or sick during the study?

If you believe you are hurt or if you get sick because of something that is done during the study, you should call Taylor Massie at (937)269-8241 immediately. It is important for you to understand that Eastern Kentucky University will not pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in this study. That cost will be your responsibility. Also, Eastern Kentucky University will not pay for any wages you may lose if you are harmed by this study.

Usually, medical costs that result from research-related harm cannot be included as regular medical costs. Therefore, the costs related to your care and treatment because of something that is done during the study will be your responsibility. You should ask your insurer if you have any questions about your insurer's willingness to pay under these circumstances.

What if I have questions?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Taylor Massie at (937)269-8241 or e-mail her at taylor_massie1@mymail.eku.edu. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent form to take with you.

What else do I need to know?

You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this study.

Please, do not consent and take part in this study at this time, if you feel you are entering an acute episode of bipolar disorder.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered, and agree to participate in this research project.

Signature of person agreeing to take part in the study

Date

Printed name of person taking part in the study

Taylor L. Massie

Name of person providing information to subject (Printed name and Signature)

