Can teaching social rhythm therapy to primary care physicians increase their confidence in treating bipolar patients?

Todd S. Hilmes
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Can Teaching Social Rhythm Therapy to Primary Care Physicians Increase Their Confidence in Treating Bipolar Patients?

By

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Presented to the Faculty of the Graduate Department of Clinical Psychology

George Fox University

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Can Teaching Social Rhythm Therapy to Primary Care Physicians Increase Their Confidence in Treating Bipolar Patients?

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Can Teaching Social Rhythm Therapy to Primary Care Physicians Increase Their Confidence in Treating Bipolar Patients?

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Abstract

Bipolar disorder (BD) is a biologically based, multifaceted disorder that increases a patient’s probability for co-morbid diagnoses such as substance abuse disorders. BD is characterized by fluctuation in mood from manic to depressed. Researchers estimate the path to recurrence in those who suffer from bipolar illness is threefold: (a) medication non-compliance, (b) stressful life events, and (c) disruptions in social rhythm.

Interpersonal and social rhythm therapy (IPSRT) is an adaptation of interpersonal psychotherapy based on the social “zeitgeber” hypothesis. According to this theory, unstable or disrupted daily routines lead to circadian rhythm instability and, in vulnerable individuals, to the very affective episodes that characterize BD. Due to co-morbidity with a number of physiological complaints and today’s managed health care environment, primary care physicians (PCPs) are often the first care providers seen by patients. Aside from medication management,
PCPs have few effective interventions for patients who present with a diagnosis of BD. The present study investigates the use of the social rhythm component of IPSRT by PCPs in a healthcare setting in order to increase the physicians’ confidence and knowledge in treating these patients. Six physicians completed a questionnaire gauging their knowledge and confidence levels working with bipolar patients in a medical clinic. They were then shown a brief training on bipolar disorder and educated on the importance of stabilizing circadian rhythms as suggested by Frank’s “Interpersonal and Social Rhythm Therapy” (2007). Results of the study found a significant increase in physician’s overall knowledge and confidence levels in working with a bipolar population. In addition, effect size was strong ($d = .81$) and participants found the presentation both informative and clinically useful.
Special Thanks

Special thanks to Dr. Ellen Frank for providing training information and initial consultation regarding the project and to Dr. John Muench for his work in helping to navigate the OHSU IRB and providing access to and facilitating the relationship with resident physicians.
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Chapter 1

Introduction

Bipolar disorder (BD) is a multifaceted, biologically based disorder diagnosed in between 3-5% of the general population. Individuals diagnosed with the illness are confronted with a lifetime of mood fluctuations which inflict consequences that are, at least devastating, and at worse fatal (Leahy, 2007). BD patients have been identified as having lost up to 14 years of effective activity and nearly 9 years of their lives (Jones, Sellwood, & McGovern, 2005). Studies examining the course of the disorder have shown a high pattern of relapse and this worsens as the individual ages (Goodwin & Jamieson, 1990).

BD is the sixth most common disability in the United States and the BD patient’s quality of life often suffers (Altman et al., 2006). Lower wages and levels of achieved education compared with higher unemployment rates, arrest rates, divorce rates, increased occupational absenteeism and reliance on workman’s compensation add to a lifetime of personal, internal struggles with one’s ever-cycling moods. (Depp, Davis, Mittal, Patterson, & Jeste, 2006; Gardner et al., 2006; Glahn, Bearden, Bowden, & Soares, 2006; Michalak, Yatham, Kolesar, & Lam, 2006). From a financial standpoint, the impact of this disorder is staggering, not only for the individual but also for employer healthcare and the federal welfare system. Morselli, Elgie, and Cesana (2004) conducted a study in which over half of the participants (n=968) were unemployed due to the illness. European studies have estimated the costs reach into the billions.
of dollars (US) range. Coupled with costs for treatment and lost production, which can account for up to 85% of the total, of those suffering from BD estimated annual costs are as high as 1.83 billion dollars (Hakkaart-van Roijen et al., 2004).

Naturally, BD affects both employed and unemployed Americans. Harley, Li, Corey-Lisle, L’Italien, and Carson (2007) identified BD as the single most expensive mental disorder covered by private employer-based insurance companies. This particular study showed the rate of BD among enrollees to be 262 per 100,000 and in the 6 months prior to a BD claim, the average cost for each enrollee was $2,690. Coverage for the next 12 months jumped to $6,826: an increase of over 20%.

In relation to a diagnosis of unipolar depression, Stensland, Jacobson, and Nyhuis (2007) found BD clients of managed care had a mean cost over $10,000 in direct per-patient cost, including over three times ($1,641 vs. $506) in medication costs. Increased hospitalizations and types of medication (antipsychotic, lithium, and anticonvulsants vs. antidepressants) contribute to this disparity. Therefore, the researchers draw the conclusion that BD may represent a good target for disease-management programs.

The costs of this disorder are not purely financial. BD has a high comorbidity rate with substance abuse (Soloman, Keitner, Miller, Shea, & Keller, 1995; Strakowski, DelBello, Fleck, & Arndt, 2000), increased suicidal behavior, and higher lifetime suicide completion rates – 1:3 compared to 1:30 (Chen & Dilsaver, 1996). Recent research has shown an additional 16% elevated risk of suicide attempts and substance abuse (Dalton, Cate-Carter, Mundo, Parikh, & Kennedy, 2003). In fact, an estimated 25% to 50% of all individuals with bipolar disorder will make at least one suicide attempt. Certain aspects of the disorder, i.e. its progressive, episodic,
and chronic nature, pose a unique problem and requires persistent focus on suicidality in both the acute depressive episodes and the preventive and maintenance clinical care (Rucci, et al. 2002). Because of this elevated risk of suicidality, BD is an increasingly dangerous disorder and successful preventive measures are badly needed.

**Etiology of Bipolar Disorder**

BD includes both psychological components and factors dynamic to the environment. In regards to other psychiatric disorders, BD has been considered one in which genetic factors play a significant etiological role. Taking these genetic factors into consideration, the onset of BD episodes may have a strong correlation with environmental and psychosocial factors. Despite their contribution, genetic factors alone cannot be blamed for BD. Even with appropriate medication management, many individuals continue to experience residual episodes or significant breakthrough episodes (National Institute of Mental Health [NIMH], 2002). Thus, the need for a better understanding of the reasons behind relapse and reoccurrence remains pertinent (Altman, et al., 2006). In response, it has been suggested psychosocial treatments may play an important role in the amelioration of this complex illness (Frank, 2005).

Goodwin and Jamieson (1990) stated that an “instability model” could be used in integrated theory for BD. They continued on to say that “instability is the fundamental dysfunction in manic depressive illness” (p. 594). Therefore, if this instability can be addressed at a biological level, patients may gain control over his or her BD.

Frank (2005) proposed a model in which biological (or genetic) vulnerability factors such as lack of REM sleep (Kupfer, 1978), unusual cortisol levels and rhythms (Cervantes, Gelber, Kin, Nair, & Schwartz, 2001), and altered hormones most closely associated with a sleeping state
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(Mendelwicz et al., 1985) exert the most significant influence on whether biological rhythm instability actually leads to the altering of biological rhythms. These rhythms are often the indication that affective episodes may be soon to follow.

Psychotherapy Treatments for Bipolar Disorder

Professionals have been searching for an efficacious treatment of BD for decades with minimal success (Frank et al., 1997). Prior to the discovery of psychotropic mood stabilizers such as lithium carbonate, psychotherapy was considered the standard treatment of BD though early practitioners struggled to conduct insight-oriented psychotherapy with this population (Fromm-Reichmann, 1949).

The fundamental ideas behind psychotherapy in the treatment of BD are threefold: symptom relief, restoration of psychosocial functioning, and prevention of relapse and recurrence (Scott, 2003). Psychotherapy is typically paired with pharmacotherapy, which remains an important aspect of treatment, though medication is far from a fix-all. Recent research has shown a significant “efficacy-effectiveness gap” in response to mood stabilizers (Guscott& Taylor, 1994). Lithium prophylaxis prevents relapse in only 25-50% of participants. Previous research has shown that even with optimal clinical conditions, over 50% of BD patients may experience additional episodes (Dickson & Kendell, 1986). In addition, 30-50% of patients given a diagnosis of BD also meet criteria for substance abuse or Personality Disorder, two diagnoses which typically predict a poorer response to medication alone (Scott, 2001a).

In the past few decades, Cognitive Behavioral Therapy (CBT) has risen in popularity for BD treatment, though the severity of BD may limit the usefulness of CBT (Rizvi & Zaretsky 2007). The principle assumption of CBT is that negative thinking patterns lead to mood swings,
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which can be alleviated by joint use of behavioral activation and cognitive restructuring to specifically address the self-statements and dysfunctional schemas. These strategies are used to increase the patient’s involvement with the environment (Craighead, Miklowitz, Frank, & Vajk, 2002). However, by definition, CBT relies on a patient’s cognitive facilities in order to be effective. Because a BD patient’s cognitive skills are severely impacted during a manic phase, CBT is often an ineffective treatment modality (Rizvi & Zaretsky, 2007).

When used in conjunction with mood-stabilizing medications, CBT has been shown to have varying success (Craighead et al., 2002). CBT therapy has been shown to be successful for medication compliance (Cochran, 1984), depression symptoms reduction via 17-sessions, of CBT group therapy work (Palmer, Williams, & Adams, 1995), and reduction of irritability, restlessness, impatience, and other symptoms reported by those who no longer meet episode criteria, but continue to report distress in the form of these symptoms (Jacobs, 1982).

Perry, Tarrier, Morris, McCarthy, and Limb (1999) compared patients who received medication management to those who received the same medication management regimen accompanied by 7-12 CBT sessions. During these sessions, patients were taught to recognize the onset of BD symptoms and seek appropriate preventative interventions. Manic episode relapses were significantly decreased in the CBT group versus control during an 18-month follow-up period. However, no differences were found in the length of time between depressive episode relapses.

Even with positive outcomes such as these, CBT is far from a perfect solution. Lam et al. (2003) reported a reduced risk of relapse, reduced rate of admission, and a shorter time in the specific bipolar episode in those who received CBT, but they went on to say that 44% relapsed
within a 12-month period. This is a vastly improved statistic from the 75% of controls to relapse but shows marked room for improvement (Jones et al., 2005).

Empirical support has also been shown for the efficacy of Family Therapy (Leahy, 2007). Miklowitz and Goldstein (1990) found positive results using Focused Family Therapy (FFT) as a behavioral intervention for patients with bipolar disorder. Nine pilot cases of recently hospitalized bipolar I participants (most recently manic) and their families participated in 21 hours of FFT conducted in patients’ homes over a 9-month period. Following this treatment, only one subject relapsed (11%) compared to 14 of 23 (61%) from a previous, naturalistic study.

Interpersonal psychotherapy (IPT; Weissman, Markowitz, & Klerman, 2000) was originally developed to treat unipolar depression. It is a form of individual therapy that is present-focused and assumes a biopsychosocial origin of depression. Typically, the patient will choose, with the help of the therapist, one of four interpersonal problem areas: grief over loss, interpersonal disputes, role transitions, or interpersonal skill deficits (Craighead et al., 2002). This has proven effective for the treatment of depressive symptoms (Elkin, 1995) and clinicians have started to use this strategy to treat BD. More recently this has been adapted by Dr. Ellen Frank and developed into an effective treatment for BD that addresses both the circadian rhythms and interpersonal aspects.

**Interpersonal and Social Rhythm Therapy**

Dr. Ellen Frank is Professor of Psychiatry and Psychology at the University of Pittsburgh School of Medicine and Director of the Depression and Manic Depression Prevention Program at Western Psychiatric Institute and Clinic. She is an expert in mood disorders and their treatment
and was a member of the American Psychiatric Association Task Force on *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition* (DSM-IV).

Interpersonal and Social Rhythm Therapy (IPSRT) is a modification of IPT and was developed by Frank (2005) to assist the therapist in treating bipolar disorder. IPSRT takes IPT ideals and encourages patients to also consider the role of circadian rhythms and their role in the cycling of their moods. There are two major goals of IPSRT: to help patients understand and re-evaluate their role in a social context in regards to the mood disorder, and to recognize the impact of interpersonal events on circadian rhythms (Craighead et al., 2002). The ultimate goal, then, is to stabilize these rhythms and gain control over the extreme moods. The basic, genetic vulnerability to BD is a “vulnerability of the circadian system” (Goodwin & Jamison, 1990). Indeed, Frank et al. (1997) demonstrated that consistency in treatment modulation was also imperative to maintaining a patient’s routines and, thus, a reemergence of symptoms.

In a study to explore the effectiveness of the intervention, Frank et al. (1997) placed patients in one of two groups: an IPSRT group, or intensive clinical management group (ICM). Both the IPSRT and ICM treatments consisted of similar frequency but IPSRT sessions were 45 minutes whereas those of ICM sessions were only 20. These 20-minute sessions focused on the topics of symptom management and medication adherence. Respective sessions were held weekly during the initial, preliminary phase. After the patients had stabilized, sessions were held biweekly and then monthly for up to two years.

During the aforementioned preliminary treatment phase, those patients in IPSRT showed more increased stabilization of their daily routines and sleep/wake cycles than those in intensive clinical management (Frank et al., 1997). IPSRT did not differ from ICM in regards to the speed
with which patients reached a stable, symptom-free state. However, over the 2-year maintenance period, those who received IPSRT in the acute treatment phase were able to maintain significantly longer without a new affective episode. This was true whether they received IPSRT in the maintenance phase or not. In addition, their ability to increase stability or regularity of daily routines was correlated with the individual’s ability to avoid recurrence during the 2-year maintenance period (Frank et al., 1997).

IPSRT addresses the interaction between the interpersonal and the biological realms by demonstrating how interpersonal stressors and social role transitions can disrupt an individual’s circadian rhythms. Just as with IPT (Klerman, Weissman, Rousaville, & Chevron, 1984), patients are helped in resolving interpersonal disputes and negotiating any role transitions that may have recently occurred. In addition, patients are taught how to stabilize those routines, which may be unstable, and how to maintain regularity despite external influences (Frank et al., 1997).

Researchers in the area of external circadian rhythm factors often refer to the term as zeitgebers or “timegivers” (Aschoff, 1981). The most influential zeitgeber is the rising and setting of the sun. This is considered a physical zeitgeber. Often in urban settings, social factors such as when one goes to and gets home from work, eats meals, and participates in certain activities (e.g. watching a particular television program) can also play an important role in circadian rhythms. Frank (2005) contends that changes in these social time cues may lead to circadian rhythm disruption and, eventually, affective episodes in vulnerable individuals, those with “fragile clocks.” Even small disruptions in vulnerable individuals (e.g. a child moving from
elementary school to middle school and having to be at the bus stop an hour earlier each day) can prove detrimental in patients with BD (Frank, 2007).

For these vulnerable individuals, the specific mood state, either manic or depressive, will often become the final psychobiological response to changes in the consistency of the daily routines or social rhythms. On the contrary, for non-vulnerable individuals, such rhythm disruption is typically mild and may appear similar to the effects of jet lag, if any effect at all (Frank, 2005). For individuals who are vulnerable to mood disorders, however, it can be difficult to change the influence of the biological instability and the effect on somatic symptoms. Frank (2005) hypothesized that these individuals become bogged down in a state of enduring “desynchronization or pathological entrainment of biological rhythms” similar to those found in major depression or mania.

An increased genetic predisposition or a personal history of affective illness may cause these at-risk individuals to end in a manic or depressed state (Malkoff-Schwartz et al., 1998). In addition, the same researchers demonstrated that disruptions by life events in social routines are indicators of manic episodes in those with BD.

The Social Rhythm aspect of IPSRT requires patients to complete the Social Rhythm Metric, a daily self-report questionnaire on which they record their sleep/wake times, levels of social stimulation, timing of daily routines such as eating, work, and exercise, and daily mood (Craighead et al., 2002). This device enables patients to track how the changes in their mood states are effected by variable daily routines and other circadian rhythms. In addition they are able to monitor how these factors manipulate their moods (Craighead et al., 2002).
Present Treatment of BD by Primary Care Physicians

Recently, attention to medical co-morbidity has become the focus among the BD population. Fenn et al., (2005) found that 81% of BD patients also had a co-morbid medical condition. Those conditions found at increased rates include coronary heart disease, hypertension, hyperthyroidism, diabetes, dyslipidemia, hepatitis, and obesity (Morriss & Mohammed, 2005). Such conditions often land the BD patient in the Primary Care Provider’s (PCP) office before ever seeking the assistance of a behavioral health specialist.

As PCPs are generally the first care providers seen by patients (Rakel, 2002), the issue of accurate diagnosis becomes paramount. More than half of those diagnosed with BD were not correctly done so until 5 years after their first symptoms of BD appeared (Lewis, 2001). Even after the correct diagnosis of bipolar I or II disorder was given, less than half were treated successfully (NIHM, 2002).

Upon initial presentation in the PCP’s office, there is a wide range of vague and undifferentiated complaints patients initially present with that range from poor sleeping patterns, anxiousness, to fatigue or low mood. Moreover, elevated rates of smoking, poor self-care, and an increased risk for pulmonary embolism exacerbate the stress, depression, and difficulties to patients’ lives brought about by BD (Morriss & Mohammed, 2005; Leahy, 2007). Unfortunately, primary care physicians have few effective interventions for patients who present with a diagnosis of BD.

The present accepted method of treatment for patients with BD consists of a psychopharmacological approach, relying on anti-depressants, lithium carbonate, and other mood-stabilizing drugs to address the symptoms and drastic mood swings (Hirschfeld et al.,
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2006; Ketter, 2007). One disadvantage to a purely pharmaceutical treatment plan is the issue of patient adherence. PCPs’ abilities to monitor the patient’s practices end as soon as the patient leaves the office. Research supports the inconsistency of the BD patient in regards to medication. Lingam and Scott, (2002) showed between 20% and 60% non-adherence rates among BD patient use of long-term prophylactic psychopharmacology use. In addition, although patients with Bipolar I Disorder require medication to help prevent manic and depressive episodes, psychosocial treatments are important adjuncts to any medication regimen (Ketter, 2007).

Purpose

Though certain approaches to psychotherapy have been found to be successful for the treatment of BD, PCPs cannot be expected to function in the role of a behavioral health specialist and conduct therapy with their clients. In addition, though they can prescribe and champion the idea of consistent medication adherence, they only know what their patients tell them in regards to actual practices. The present study suggests that training PCPs to advocate that patients use components of Frank’s (2005) IPSRT model will increase physicians’ feelings of competence, usefulness, and satisfaction in treating their patients with this pervasive illness. After receiving one training session and given the opportunity to explore internet-based curriculum, we believe the physicians’ levels of comfort in working with this population will increase, in addition to their confidence in treating BD patients and overall satisfaction of their knowledge base in regards to this pervasive disorder. As an overall consequence, once they have established a level of comfort, their overall quality of care will increase.
Chapter 2

Method

Participants

The participants for this research were residents in the Family Medicine Residency program at Oregon Health and Sciences University (OHSU), Portland, OR. This program admits 12 residents each year to the three-year training program. Four residents are assigned to one of three residency clinics in Portland for the duration of their residency training. These four are not necessarily the same four used as participants. The training in these three clinics is similar and several training elements occur for all the residents. However, the socioeconomic status of the populations served by each of the three training clinics differs. Two of these clinics, Richmond and South Waterfront, were planned to be used as the experimental and control groups, respectively. In actuality, South Waterfront physicians were not used in the final analysis.

Because of its geographic location, Richmond clinic’s patients reflect the economic diversity of the city of Portland. The clinic’s urban setting allows access to approximately 40,000 of Portland’s residents. Richmond has become a Federally Qualified Health Center (FQHC), allowing it to care for a larger number of students, uninsured (both employed and unemployed), Medicaid, and Medicare patients from its service area. The population is culturally diverse and patients’ ages range from the newborn to the elderly, though only adults will be included in the current study.
The study’s initial design, as seen in Table 1, called for a control group \((n = 12)\) of resident physicians from OHSU South Waterfront clinic. South Waterfront clinic serves approximately 24,000 patients annually. Many of the clinic’s patients have been cared for in the practice for many years and are accepting of resident physicians. In addition, the clinic serves a varied mix of patients including a commercially insured, long standing indigent population, and OHSU employees in the tri-county area around Portland. Patients come from culturally diverse neighborhoods and also the high socioeconomic neighborhood of South Waterfront. However, due to poor response rates by the potential control group, South Waterfront physicians were not used in the final study.

### Table 1

*Original Versus Revised Design*

<table>
<thead>
<tr>
<th>Element</th>
<th>Original Design</th>
<th>Revised Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>(n = 12)</td>
<td>-</td>
</tr>
<tr>
<td>Experimental group</td>
<td>(n = 12)</td>
<td>(n = 6)</td>
</tr>
<tr>
<td>Total Participants</td>
<td>(n = 24)</td>
<td>(n = 6)</td>
</tr>
<tr>
<td>Preparation prior to data</td>
<td>List of bipolar patients given to physicians</td>
<td>No list</td>
</tr>
<tr>
<td>collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Gathering</td>
<td>Pre (baseline), post (1 week after), follow-up (3 months after) training</td>
<td>Pre (baseline), post-training (7 days &amp; 26 days following training)</td>
</tr>
</tbody>
</table>

The economic and cultural diversity in Richmond clinic allowed for greater generalization in the findings of the present study. In addition, the high volume of patients seen allowed for numerous physician encounters with bipolar patients. Finally, George Fox Graduate
Department of Clinical Psychology (GDCP) practicum students and faculty at Richmond clinic allowed for ease of communication between clinic administrators and researchers.

Initial designs called for participants \((n = 24)\) to be recruited from their physician’s training from these two urban outpatient, primary care clinics and asked to voluntarily participate in the study. The participants would be physicians, with resident status, employed at one of the two clinics. Resident physicians \((n = 12)\) employed at Richmond would be assigned to the experimental group. Those employed at South Waterfront \((n = 12)\) would be assigned to the control group.

Participants were recruited from their physician’s training from this urban out-patient, primary care clinic and asked to voluntarily participate in the study. All participants were physicians, with resident status, employed at Richmond clinic. Of the 12 resident physicians employed at the Richmond clinic, six completed the initial questionnaire, attended the training in its entirety, and identified themselves on and completed the post-questionnaire.

The age of the physicians ranged from 29 to 42, and the mean age was 32.66. In regards to gender, 100% were female. The majority (83%) of the residents were European American (White or White, non-Hispanic), while one identified herself as Hispanic. Half the participants (50%) had completed their medical degrees between zero and two years prior to training, while the other half (50%) had completed their degrees three to five years prior. None of the physicians endorsed having any previous graduate-level training in psychology. The physicians were also asked if they felt the prevalence of bipolar disorder was increasing among their patients. The majority (66%) felt it is not, while two said they do find more patients present with this diagnosis.
Initial plans also called for a list of patients with a bipolar diagnosis to be generated by searching for billing code numbers by a billing specialist at Richmond. From this list, residents for both the control and experimental groups would receive a list of their patients who have been given a diagnosis of bipolar disorder. We suggested this so that a positive outcome in the experimental group cannot just be attributed to the idea that those residents are just more aware of the diagnosis and therefore paying more attention to these patients. In the study’s final design, however, we were unable to obtain such a list.

**Materials**

A Likert-scale questionnaire used to gauge physicians’ knowledge levels of BD and confidence levels in treating the disorder was developed by the author and administered prior to the IPSRT training module. A similar questionnaire, with two additional questions, was used at one week after IPSRT training. Initial designs had called for both experimental and control groups to complete the survey. The survey would be used again for the experimental group only following the training and a second time approximately three months after the training for both experimental and control groups.

A packet of information regarding the importance of the stabilization of circadian rhythms in the treatment of bipolar disorder was distributed to physicians in conjunction with this training session. The packet consisted of the PowerPoint slides used in the training describing previous research findings and success rates, the Social Rhythm Metric II (SRM-II; Frank, 2007), and a brief summary of what IPSRT is and how it works. The SRM-II helps to track participants’ circadian rhythms by noting the time of occurrence of five daily activities (out
of bed, first contact with people, start of daily activity, dinner, and going to bed) and the number of people with whom the individual engages during each activity.

Immediately following the IPSRT training, an Internet link was provided to physicians in order to gain access to a website that covers the same information presented at the IPSRT training session. This allowed physicians a resource to which they can refer if/when questions arise. A counter was placed on the website in order to track the number of times it was accessed. During the 26-day period between the date of training and the final date of data collection, the website was not viewed by any participants.

**Procedure**

The physicians attended a training session lasting approximately 40 minutes, conducted at the Richmond Clinic. The training session was voluntary, but conducted during a typical monthly training time residents attend in conjunction with their clinical work. The training included an overview of BD, an introduction to IPSRT, previous research regarding positive outcomes among patients diagnosed with bipolar disorder, and how to use the SRM-II. Training materials were based off original training slides by Dr. Ellen Frank. Physicians were also be provided with a packet of information about IPSRT and a link to a website that reviewed the information discussed during the training session. The purpose of this training was to introduce Social Rhythm Therapy to physicians and teach them intervention strategies they can use to treat their patients. The accompanying Internet link allowed for future reference, as needed by the individual physician.

The original design called for data to be collected in three phases: Pre-training (baseline), post-training (one week after), and follow-up (three months after). Prior to the start of the training
session, physicians (experimental and control groups) would complete a Likert-scale questionnaire used to assess their knowledge of BD and their confidence working with, and treating patients with this diagnosis. This information would be collected and used as baseline data. Physicians in the experimental group only then received a questionnaire one week following the training session. This information would serve as post-training data.

In actuality, data was collected in two phases only: Pre-training (baseline) and post-training (one week after). Prior to the start of the training session, physicians completed a Likert-scale questionnaire used to assess their knowledge of BD and their confidence working with, and treating patients with this diagnosis. This was collected and used as baseline data. Physicians then received a link to an electronic questionnaire one week following the training session. This information was collected on Survey Monkey and served as post-training data. Due to poor response rates, a reminder email was sent 19 days following the initial email, 26 days following the training.

The original design also called for experimental and control group physicians to then see their patients as usual, uninterrupted for a 3-month period. Those in the experimental group were not to receive any formal review courses throughout the three months, but they would have access to the web-based information in order to answer questions that may arise during this phase. At the end of the 3-month period, physicians (both experimental and control groups) would then complete the same Likert-scale measure administered at the initial training session. This data was to be used to assess their level of confidence in working with, treating, and successfully helping patients suffering from BD.
The final study, however, did not employ the use of this follow-up period. Because of poor response rates, it did not seem useful to have follow-up data from such a small group. In addition, the lack of control group within the final study would not have allowed for a strong comparison.

**Data Analysis**

The present study hypothesized that the introduction of IPSRT methods into the treatment catalog of primary care physicians will increase their confidence and knowledge to help patients with bipolar disorder. Results were taken from the physicians’ questionnaires and analyzed using SPSS. Ten paired sample $t$-tests were conducted in order to determine if changes in confidence and perceived ability levels were present.
Chapter 3

Results

The present research hypothesized primary care physicians’ overall confidence levels and knowledge would increase following a brief training session introducing social rhythm therapy. Prior to the training, resident physicians were asked to complete a questionnaire gauging their general knowledge of bipolar disorder in addition to their current confidence levels working with bipolar patients, \( (M = 26.17, SD = 3.061) \). Following the training, physicians were then asked to complete a second questionnaire used to gauge the change in confidence and knowledge, \( (M = 34.17, SD = 2.639) \). The results of the survey were analyzed in SPSS. Ten paired-samples t-tests indicated a significant increase \((p = .001)\) in physician’s confidence and abilities in working with this population before and after the training session. The effect size was strong \((d = .81)\). Thus, the results of the study were also clinically meaningful.

As seen in Table 2, prior to attending the brief training on bipolar and IPSRT methods, physicians felt somewhat neutral regarding their familiarity with the DSM-IV diagnosis of bipolar disorder. They also felt neutral in their ability to recognize bipolar disorder in patients from their own observations and the patients’ reports, comfort levels working with patients who have been diagnosed with, or meet the criteria for, bipolar disorder, being helpful to patients who are diagnosed with, or meet the criteria for, bipolar disorder, and being helpful to this population, aside from simply prescribing medication.
Table 2

*Means and Standard Deviations on Pre- and Post-Training Questionnaires.*

<table>
<thead>
<tr>
<th></th>
<th>Pre-Training</th>
<th></th>
<th>Post-Training</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>1. I am familiar with the DSM-IV diagnosis of bipolar disorder.</td>
<td>3.67</td>
<td>.52</td>
<td>3.83</td>
<td>.41</td>
</tr>
<tr>
<td>2. I know the difference, as described in DSM-IV between bipolar I, bipolar II, and bipolar NOS disorders.</td>
<td>2.67</td>
<td>.82</td>
<td>3.83</td>
<td>.75</td>
</tr>
<tr>
<td>3. I can recognize bipolar disorder in a patient from my observations and their self-report.</td>
<td>3.50</td>
<td>1.05</td>
<td>3.67</td>
<td>.52</td>
</tr>
<tr>
<td>4. I feel comfortable working with a patient who is diagnosed with, or meets the diagnostic criteria for, bipolar disorder.</td>
<td>3.67</td>
<td>.82</td>
<td>4.00</td>
<td>.00</td>
</tr>
<tr>
<td>5. I feel confident working with a patient who is diagnosed with, or meets the diagnostic criteria for, bipolar disorder.</td>
<td>2.67</td>
<td>.82</td>
<td>3.33</td>
<td>.52</td>
</tr>
<tr>
<td>6. I think I can be helpful to patients who are diagnosed with, or meets the criteria for, bipolar disorder.</td>
<td>3.50</td>
<td>.55</td>
<td>4.33</td>
<td>.52</td>
</tr>
<tr>
<td>7. I understand the importance of stabilizing circadian rhythms in order to help regulate mood swings of bipolar patients.</td>
<td>2.33</td>
<td>.52</td>
<td>4.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

(continued on next page)
8. I am familiar with Interpersonal and Social Rhythm Therapy (IPSRT).  
   1.17   .41   3.67   .52

9. Aside from prescribing medication, I know how to be helpful to patients diagnosed with, or meeting criteria for, bipolar disorder.  
   3.00   .63   3.50   .55

10. Total   26.17   3.06   34.17   2.64

*Note. N = 6. Scale: 1 = strongly disagree; 5 = strongly agree.*

Table 1 also shows physicians did not agree they knew the difference between bipolar I, bipolar II, and bipolar NOS disorders, and they did not feel confident working with patients who have been given a diagnosis, or meet the criteria for, these disorders. Lastly, Table 1 also shows physicians were unfamiliar with Interpersonal and Social Rhythm Therapy (IPSRT), prior to training.

Tables 2 and 3 indicate the change following the brief training. Overall, general knowledge and confidence in identifying, and working with, bipolar disorder in patients significantly increased. In addition, significance between pre and post training was seen in regards to how physicians felt in respect to knowing the difference between bipolar I, bipolar II, and bipolar NOS disorders, ability to be helpful to bipolar patients, recognizing the importance in managing circadian rhythms in bipolar patients, and familiarity with IPSRT. The statement, “Aside from prescribing medication, I know how to be helpful to patients diagnosed with, or meeting criteria for, bipolar disorder” was approaching significance.
Table 3

*Difference in Pre- and Post-Test Means, Degrees of Freedom (df), and Significance*

<table>
<thead>
<tr>
<th>Description</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am familiar with the DSM-IV diagnosis of bipolar disorder.</td>
<td>-.54</td>
<td>5</td>
<td>.611</td>
</tr>
<tr>
<td>2. I know the difference, as described in DSM-IV between bipolar I, bipolar II, and bipolar NOS disorders.</td>
<td>-2.91</td>
<td>5</td>
<td>.034**</td>
</tr>
<tr>
<td>3. I can recognize bipolar disorder in a patient from my observations and their self-report.</td>
<td>-.35</td>
<td>5</td>
<td>.741</td>
</tr>
<tr>
<td>4. I feel comfortable working with a patient who is diagnosed with, or meets the diagnostic criteria for, bipolar disorder.</td>
<td>-1.00</td>
<td>5</td>
<td>.363</td>
</tr>
<tr>
<td>5. I feel confident working with a patient who is diagnosed with, or meets the diagnostic criteria for, bipolar disorder.</td>
<td>-2.00</td>
<td>5</td>
<td>.102</td>
</tr>
<tr>
<td>6. I understand the importance of stabilizing circadian rhythms in order to help regulate mood swings of bipolar patients.</td>
<td>-5.00</td>
<td>5</td>
<td>.004*</td>
</tr>
<tr>
<td>7. I am familiar with Interpersonal and Social Rhythm Therapy (IPSRT).</td>
<td>-7.91</td>
<td>5</td>
<td>.001*</td>
</tr>
<tr>
<td>8. I am familiar with Interpersonal and Social Rhythm Therapy (IPSRT).</td>
<td>-11.18</td>
<td>5</td>
<td>.000*</td>
</tr>
<tr>
<td>9. Aside from prescribing medication, I know how to be helpful to patients diagnosed with, or meeting criteria for, bipolar disorder.</td>
<td>-2.24</td>
<td>5</td>
<td>.076</td>
</tr>
<tr>
<td>10. PreTotal – PostTotal</td>
<td>-7.75</td>
<td>5</td>
<td>.001*</td>
</tr>
</tbody>
</table>

*Note. N = 6. Scale: 1 = strongly disagree; 5 = strongly agree. **p < .05; *p < .01*
Finally, the participants found the training both informative ($M = 4.33$, $SD = .52$) and clinically useful ($M = 4.33$, $SD = .52$). Thus, the training accomplished what it was meant to do and physicians found the content to be useful, not only for theoretical conceptualization of patients, but also for clinical utility.

Participants also provided two qualitative responses regarding their beliefs of primary care providers’ roles in the diagnosis and treatment of bipolar disorder. The question, “Do you believe that the prevalence of bipolar disorder is increasing among your patients?” yielded responses regarding the number of years in practice and inaccurate diagnoses. The questions, “What do you see is the role of PCP in diagnosis of bipolar disorder?” and “What do you see is the role of PCP in treatment of bipolar disorder?” provided two main themes (a) a desire by physicians to have their patients also supported by a mental health professional, and (b) some degree of discomfort in making the initial diagnosis of bipolar disorder.
Chapter 4

Discussion

Implications of Results

The results of this study suggest this training curriculum was successful in teaching physicians the importance of circadian rhythm stabilization in bipolar patients and how to use a simple tool such as the SRM-II in assisting patients with recognizing this fact. Thus, the training increased their perceived knowledge and confidence in working with this population.

The training was a brief, yet effective method for assisting physicians in building their knowledge base in regards to diagnosing and treating bipolar disorder. In addition, it gave an alternate perspective of the disorder and emphasized an important area of focus, and one that has often been overlooked, circadian rhythm stabilization.

Participants found the training informative and clinically useful. Though the follow-up aspect of the original study had to be abandoned, it is likely physicians would have used the methods discussed in the training, if not as a direct intervention, thentoeducate their patients.

Limitations

Limitations of the study include small sample size, lack of a control group, and homogeneity among the participants’ gender, ethnicity, and years since completing the medical degree. Although significant differences were found in pre- and post-test questionnaires and the effect size was quite large, a larger, more diverse sample would enable for greater generalization of the results.
A control group, as originally designed, may have helped control for such variables and would also have allowed comparison between perceived knowledge and confidence levels in physicians who attended the training and those who did not, thus providing a more accurate picture as to how confident and how comfortable physicians feel in treating bipolar disorder based solely on training received in medical school and, perhaps, previous encounters with bipolar patients. The control group would also allow for broader generalizations regarding the training’s effectiveness.

One potential reason for the small sample size is inherent to the population. Medical doctors’ schedules are often such that they are unable to attend trainings for mental health issues and must focus their strained resources on medical issues. In addition, family medicine doctors receive some mental health training, though they often do not focus on mental health issues in practice.

Richmond clinic may be an exception to that rule. Unlike the other three OHSU family medicine clinics in the Portland area, Richmond employs doctoral-level psychology students who, as a part of their practicum training, deliver behavioral health services to the patients at Richmond in a fully integrated environment. As such, physicians, particularly resident-level physicians, are much more open to learning about mental health issues than family medicine doctors at other clinics might be. In short, this population was ripe for sharing knowledge on how to treat this mental health diagnosis. It is likely not all family medicine clinics value behavioral health training for medical care providers so highly.

A structural weakness of the study may have been the construction of the questionnaires. In causal conversation with one participant, it was clear the questions regarding comfort and
confidence working with bipolar patients were not clear. This physician mentioned she read the questions as having comfort/confidence in treating the patient medically, which she would endorse at a higher level rather than the intended meaning, treating the patient’s actual bipolar disorder, which would have generated a lower score.

Finally, during the data collection phase, poor response rates to the initial email prompting the completion of the post-training survey led to a reminder email being sent approximately 19 days after the first; 26 days after the training. This is a considerably longer period than the initially anticipated seven days. Had the reminder been sent sooner, or had all participants completed the survey following the initial appeal, significance and effect size may have actually been somewhat larger. It is reasonable to presume that, over time, physicians became less enthusiastic about the training, merely due to normal forgetting of the training’s utility.

In addition to these limitations, it is also worth noting bipolar disorder is a particularly chaotic disorder. Patients struggling with it are often described by providers, both medical and mental health, to be some of the most difficult with whom providers work. It is not unusual to have rather “easy” patients when they present in manic states. They can appear happy, energetic, and willing to follow through with any and all treatment recommendations. The exact same patients may miss their next appointment if they are in the middle of a depressive episode making the population particularly frustrating for providers. Thus, any research involving this population will present multiple challenges despite the structural design of the project.
Recommendations for Future Research and Training

Qualitative responses provided by participants yielded additional information in regards to their thoughts on the roles of primary care providers (PCPs) in the diagnosis of patients with bipolar disorder. This information could help guide any future research on the topic. One theme that emerged concerning the diagnosis of the disorder was having such a diagnosis confirmed by a mental health provider/psychologist/psychiatrist. Some participants felt comfortable in making the diagnosis, but would like further assistance to help insure accuracy. Another felt PCPs are capable of making an accurate diagnosis themselves, whereas one participant felt PCPs do not have the adequate training necessary.

A second qualitative question asked about the roles of PCPs in the treatment of bipolar disorder. Again, participants indicated they felt comfortable in prescribing medication, but only after a firm diagnosis has been established and only in conjunction with a mental health treatment plan. In addition to appropriate medication, other opinions were that PCPs should also provide support and help patients find appropriate forms of therapy (e.g., CBT) and a qualified therapist.

An anticipated by-product of helping physicians to feel more confident in serving their patients was that they would generate better overall care to their patients. There was no effort made in the present study to measure this variable, but the topic presents an area where future research may be fruitful.

Though used with resident physicians with a limited amount of experience, the training was designed to be delivered to any professional providing behavioral health services to patients who are diagnosed with bipolar disorder. This could include physicians with any level of
training, other medical professionals (nurses, medical assistants, medical students), in addition to social workers, licensed professional counselors, marriage and family therapists, or graduate students from any of the above programs. Given the multiple populations that could be used the potential for future research immense.

Changing the participants in a study such as this may also help increase the number of participants who complete the study without sacrificing the purpose of the intervention. For example, in order to circumvent the challenge of relying on physicians to find time in their schedules to attend the training, if medical assistants or nurses were targeted as the professionals to deliver the intervention to patients, the physicians’ busy schedules would not be an issue in either attending a scheduled training or completing follow-up questionnaires.

The main reason for conducting this study was to explore whether or not IPSRT could be used in a primary care setting. Given the constraints of the system, short-term therapy and intervention in a medical setting, it is not possible to conduct full IPSRT sessions as originally developed by Dr. Frank (2007). Therefore, future research in regards to patients’ rates of recovery and maintenance of their bipolar disorder would be beneficial. The hypothesis of the current study focused on physician’s abilities and knowledge in regards to bipolar disorder and IPSRT, but their skills with IPSRT, overall, are inconsequential if IPSRT does not work for the patients in the given setting.

The initial plan of allowing physicians a 3-month period with which to see their clients as normal would have permitted exploration of whether they were will and could use the social rhythm interventions they were trained on. Given the fact that a large portion of the original design had to be abandoned due to poor response rates, additional research could take some
aspects of the intended design and expand this body of research that was shown to be effective. A primary area of interest might be to follow up with training participants and conduct follow-up research investigating their willingness to use the social rhythm interventions in addition to its utility and effectiveness in the primary care setting.

Finally, causal conversation with the physician participants yielded the intriguing idea that bipolar disorder is often purposefully misdiagnosed. In the medical setting, bipolar may be used as a default diagnosis when one witnesses significant pathology, but does not want to diagnose something perceived as being more serious (e.g., schizophrenia). The reason for this hesitancy being that funding and reimbursement from insurance can often be difficult to obtain for psychotic or Axis II disorders. If this is indeed the case, a major concern of the field should be the accuracy of the diagnoses, particularly those patients being treated with psychopharmacological methods, which, as stated previously, is imperative for helping to control the drastic mood swings of bipolar patients. This supports the need for additional training among frontline professionals in working with this population.

Despite the shortcomings of the study and the fact the design had to be significantly altered midway through, the study represents what could be the beginning of a major shift in support of physicians and their treatment of bipolar disorder. Empirical research has shown time and again the frustrations presented by this disabling disorder. Costs for hospitalizations, loss of production, and medications embody millions of dollars spent on methods of treatment that are less than ideal. Social rhythm therapy is an easy to understand concept that can be promoted by patients’ physicians in addition to their regular medication regimen. After attending a brief training session, physicians reported a significant increase in their knowledge and confidence
levels in working with bipolar patients. Physicians also reported the training to be informative and clinically useful. Given the design of the training, it can be used in a number of different medical settings and, possibly, with various medical professionals. Further investigation of the training’s flexibility and effectiveness in regards to patients’ well being is warranted.
References:


Appendix A

Demographic Information
Demographics

Have you completed previous training in psychology/psychiatry?  Yes  No
If yes, please explain:

Years since completing medical degree:  0-2  3-5  5-10  10+

Age: ________

Gender:  Male  Female

Ethnicity:  White  White, non-Hispanic  African-American
           Hispanic  Asian-Pacific Islander  Native American

Do you believe that the prevalence of bipolar disorder is increasing among your patients?  Yes  No
Explain:

What do you see is the role of PCP in diagnosis of bipolar disorder? Please give a brief explanation.

What do you see is the role of PCP in treatment of bipolar disorder? Please give a brief explanation.
Appendix B

Pre Questionnaire
Please use this scale in order to answer the following questions regarding your current attitudes, feelings, and knowledge of bipolar disorder and treating patients with this diagnosis. Circle the number that best matches your feelings:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

1. I am familiar with the DSM-IV diagnosis of bipolar disorder.  
   1  2  3  4  5

2. I know the difference, as described in DSM-IV between bipolar I, bipolar II, and bipolar NOS disorders.  
   1  2  3  4  5

3. I can recognize bipolar disorder in a patient from my observations and their self-report.  
   1  2  3  4  5

4. I feel *comfortable* working with a patient who is diagnosed with or fits the diagnostic criteria for bipolar disorder.  
   1  2  3  4  5

5. I feel *confident* working with a patient who is diagnosed with or fits the diagnostic criteria for bipolar disorder.  
   1  2  3  4  5

6. I think I can be helpful to patients who are diagnosed with or fit the criteria for bipolar disorder.  
   1  2  3  4  5

7. I understand the importance of stabilizing circadian rhythms in order to help regulate mood swings of bipolar patients.  
   1  2  3  4  5

8. I am familiar with Interpersonal and Social Rhythm Therapy (IPSRT).  
   1  2  3  4  5
9. Aside from prescribing medication, I know how to
be helpful to patients diagnosed with or fitting criteria
for bipolar disorder.

1 2 3 4 5
Appendix C

Post Questionnaire
Please use the this scale in order to answer the following questions regarding your current attitudes, feelings, and knowledge of bipolar disorder and treating patients with this diagnosis. Circle the number that best matches your feelings:

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly agree

1. I am familiar with the DSM-IV diagnosis of bipolar disorder.
   1  2  3  4  5

2. I know the difference, as described in DSM-IV between bipolar I, bipolar II, and bipolar NOS disorders.
   1  2  3  4  5

3. I can recognize bipolar disorder in a patient from my observations and their self-report.
   1  2  3  4  5

4. I feel **comfortable** working with a patient who is diagnosed with or fits the diagnostic criteria for bipolar disorder.
   1  2  3  4  5

5. I feel **confident** working with a patient who is diagnosed with or fits the diagnostic criteria for bipolar disorder.
   1  2  3  4  5

6. I think I can be helpful to patients who are diagnosed with or fit the criteria for bipolar disorder.
   1  2  3  4  5

7. I understand the importance of stabilizing circadian rhythms in order to help regulate mood swings of bipolar patients.
   1  2  3  4  5

8. I am familiar with Interpersonal and Social Rhythm Therapy (IPSRT).
   1  2  3  4  5
9. Aside from prescribing medication, I know how to be helpful to patients diagnosed with or fitting criteria for bipolar disorder. 

   1 2 3 4 5
   Strongly disagree Disagree Neutral Agree Strongly agree

10. I found the training session and PowerPoint presentation on IPSRT *informative*.

   1 2 3 4 5

11. I found the training session and PowerPoint presentation on IPSRT *clinically useful*.

   1 2 3 4 5
Appendix D

Curriculum Vitae
CURRICULUM VITAE

Todd S. Hilmes, M.A.
14482 Indian Trails
Biloxi, MS 39532
Work: 228-528-5358
Cell: 503-544-9747
Email: Todd.Hilmes@va.gov
thilmes06@georgefox.edu

EDUCATION

2008-2011 George Fox University
Newberg, Oregon
Graduate Department of Clinical Psychology: APA Accredited
Doctor of Psychology, Clinical Psychology (Anticipated graduation: July 2011)
Dissertation title: Can Teaching Social Rhythm Therapy Increase Primary Care Physician’s Confidence in Treating Bipolar Patients?
Final Oral Defense completed – June 2010

2006-2008 George Fox University
Newberg, Oregon
Graduate Department of Clinical Psychology:
Master of Arts, Clinical Psychology

1997-2002 Western Washington University
Bellingham, Washington
Bachelor of Arts, Psychology and German

SUPERVISED CLINICAL EXPERIENCE

Aug. 2010-Present VA Gulf Coast Medical Center: APA Accredited Internship Psychology Services
Biloxi, Mississippi
Long-term Supervisor: Desmon Mitchell, Ph.D.
Non-Rotation Duties:
• Attend weekly seminars covering a myriad of topics, including:
  Neuropsychological and Personality/Cognitive Assessment, Diagnostic, and Professional Issues
• Developed, recruited patients for, and co-facilitate Multifamily Therapy Group for Veterans and their family members coping with severe mental illness
• Provide Employee Assistance Program (EAP) services for VA employees interested in developing stress management strategies
• Administer comprehensive neuropsychological assessments utilizing a flexible battery approach. Complete all aspects of assessment including: scoring, diagnosis, report writing, and providing feedback to patients

**Rotation 1: Inpatient Psychiatry**
(3 months full-time)
*Supervisor:* Clinton (Butch) Martin, Jr., Ph.D.
*Duties:*
• Participated in daily treatment planning meetings with a multidisciplinary team including social work, psychiatry, quality, and nursing
• Participated as a multidisciplinary team member and conducted discharge-planning meetings
• Conducted 1-on-1 supportive therapy with patients on the inpatient unit
• Facilitated weekly group with patients on the unit. Topics included, Goal-Setting, Relaxation/Stress Management, Benefits of Exercise, Sleep Hygiene, and Assertiveness among others
• Conducted brief neuropsychological screening and full battery diagnostic assessments

**Rotation 2: Psychosocial Residential Rehabilitation Treatment Program**
PTSD Intensive Outpatient (PRRTP PTSD IOP)
(3 months full time)
*Supervisors:* Linda Cox, Ph.D. & Kara Vick, Ph.D.
*Duties:*
• Participated as a member of the PTSD IOP treatment team
• Attended weekly new patient screenings for admission into the program
• Provided individual and group psychotherapy for Veterans, groups include Cognitive Processing Therapy (CPT), Mindfulness using Dialectical Behavioral Therapy (DBT), Anger Management, Goal Setting, and Seeking Safety in addition to numerous processing groups
• Provided diagnostic intake assessments for Veterans during their first week in the program

**Rotation 3: Clinical Health Psychology/Behavioral Medicine**
*Supervisor:* Ronald Alexander, Ph.D.
*Duties:*
• Respond to consultations from healthcare providers throughout the medical center
Treatment of Bipolar Disorder

• Assess and treat a variety of medical conditions caused or affected by lifestyle factors including: chronic pain, chronic obstructive pulmonary disease, cancer, tension and migraine headache, temporomandibular disorders, insomnia and other sleep disorders, diabetes, irritable bowel syndrome, and obesity
• Work with interdisciplinary teams comprised of a variety of health-care professionals including: OEF/OIF Traumatic Brain Injury clinic, Healthy Sleep Program, Chronic Pain Clinic, and the MOVE! weight management program

Rotation 4: Mental Health Outpatient Clinic
(3 months half-time)
Supervisors: Scott Cardin, Ph.D.
Duties:
• Participate in weekly Inter-Disciplinary Treatment (IDT) meetings and monthly staff meetings
• Provide individual and group psychotherapy
• Consultation and coordination of services throughout the medical center in order to assess patient needs for medical management of symptoms
• Additional duties include: assessment and evaluation, diagnostic clarification, evaluation and determination of need for inpatient psychiatric admission, coordination of inpatient admission with inpatient ward staff and emergency room staff, “walk-in” crisis management, treatment planning

Rotation 4: Women’s Mental Health Clinic
(3 months half-time)
Supervisor: Scott Cardin, Ph.D.
Duties:
• Work a member of a multidisciplinary team that includes Psychologists, Psychiatrists, Pharmacists, Physician Assistants, Nurse Practitioners, Social Workers, and Nurses.
• Provide outpatient services to female Veterans including assessment and evaluation, diagnostic clarification, evaluation and determination of need for inpatient psychiatric admission, coordination of inpatient admission with inpatient ward staff and emergency room staff, “walk-in” crisis management, treatment planning

June 2009 – June 2010
Pre-Intern Practicum
Oregon Health & Science University (OHSU) Family Medicine at Richmond, Portland, Oregon.
Supervisors: Clark Campbell, Ph.D., ABPP & Tamara Hoogestraat, Psy.D.
Duties:
Treatment of Bipolar Disorder

- Consultation and collaboration with primary care physicians, medical residents, psychiatrists, nurses, and social workers in a fast-paced outpatient medical clinic
- Served a diverse and underserved population of low SES adults, adolescents, children, and seniors in an inner city, federally funded clinic
- Drafted psycho-diagnostic evaluations and reports for physician referrals
- Provided recommendations to physicians regarding pharmacological, psychological, and other interventions
- Conducted cognitive, neuropsychological, and personality assessments
- Engaged in brief, and, occasionally longer-term individual psychotherapy with adults, adolescents, and seniors
- Co-facilitated adult *Coping Skills* group. Topics included boundaries, mindfulness, relaxation, and cognitive distortions
- Received two hours of weekly supervision; 1-hour group, 1-hour individual

**May 2009 – Sept. 2009**

**Supplemental Practicum**

**St. Paul Elementary School, St. Paul, Oregon**

*Supervisor:* Elizabeth Hamilton, Ph.D.

*Duties:*

- Administered extensive cognitive and achievement battery to an elementary school student in a small, rural school district suspected of having a learning disability and update Individualized Education Plan (IEP)
- Assessments also ruled out ADHD, depression, anxiety, and interpersonal relationship problems
- Scored assessments and determined if a learning disability was present; wrote a psychological report to that effect
- Received individual supervision as needed.

**Aug. 2008 – July 2009**

**Practicum II**

**Kaiser Permanente Mental Health Services, Clackamas, Oregon**

*Supervisor:* Tom Smurthwaite, Ph.D.

*Duties:*

- Provided short-term individual therapy with adolescents, adults, and couples from a Cognitive Behavioral perspective
- Conducted cognitive, neuropsychological, and personality assessments and provided feedback to patients following assessments
- Reviewed charts and medical records, completed required Electronic Medical Record (EMR) documentation
- Majority of treatment focused on adjustment disorders, depression, and anxiety
- Additional diagnoses included substance abuse, schizophrenia, psychotic disorders, obsessive-compulsive disorder, and ADHD assessments
• Received weekly individual supervision, monthly neuropsychology supervision, and monthly group trainings.

Aug. 2007 – May 2008

Practicum I

Columbia River Community Mental Health, Vancouver, Washington

Supervisors: Colin Joseph, Ph.D. & Neil Friedman, M.A., L.C.S.W.

Duties:
• Served a diverse and underserved population of low SES adults and seniors in an inner city clinic
• Provided short-term individual therapy two days per week on an outpatient basis
• Co-facilitated Seeking Safety (Najavits, 2001) group that focuses on safe coping skills for adults with PTSD
• Clients’ diagnoses include major depressive disorder, bipolar disorder, PTSD, adjustment disorders, mental retardation, and schizoaffective disorder
• 2.5 hours of weekly supervision; 1.5-hours group, 1-hour individual

Jan 2007 – April 2008

Pre-practicum:

University Counseling Center,
George Fox University, Newberg, Oregon

Supervisors: Patricia Warford, Psy.D., Melinda Pearson, M.A., & Tamara Hoogestraat, M.A.

Duties:
• Provided outpatient services to volunteer female and male undergraduate students. Services included intake interviews, individual psychotherapy, diagnosis, and treatment planning
• Responsibilities included report writing, case presentations, and consultation with both supervisor and clinical teams
• All sessions taped and reviewed by supervisors
• 2 hours of weekly supervision; 1-hour group, 1-hour individual

PEER REVIEWED PUBLICATIONS


PROFESSIONAL PRESENTATIONS

A page from a document discussing the treatment of Bipolar Disorder. It includes contributions by various authors, presentations, and research experiences. The text is formatted in a natural reading style, with proper formatting for citations and research experiences.
• Provided Student Council and faculty with statistical analysis and information regarding the emotional/psychological wellbeing of the students in the program as well as how they feel GDCP community functions as a whole
• Provided useful suggestions on making improvements and addressing “critical responses” (including suicidality, drug use, eating disorders, etc)

2008

Research Assistant
Newberg, OR
Supervisor: Nathan Frise, M.A.
Duties:
• Paid administration of subtests from WAIS-III, WRAML-2, & Rey-Osterreith Complex Figure Task to several volunteer adults as part of data collections for dissertation assessing long-term memory decay as measured by specific subtests.

2007-2008

Research Team Member
Stress and Quality of Life in Primary Care Outpatients.
George Fox University, Newberg, Oregon.
Graduate Department of Clinical Psychology
Supervisor: Clark Campbell, Ph.D., ABPP
Duties:
• Developed a survey, which was administered to primary care clinic patients studying the likelihood of visits to a behavioral health care specialist in the same clinic as the primary care provider, in addition to surveys used to assess Axis IV and Axis V traits
• Responsible for preparation of surveys, data collection, and statistical analysis
• Assisted in writing and poster preparation for presentation at a professional conference.

2007-2008

Research Team Member
Motivation for International Volunteer Service
George Fox University, Newberg, Oregon.
Graduate Department of Clinical Psychology,
Supervisor: Clark Campbell, Ph.D., ABPP
Duties:
• Analyzed data obtained through questionnaires to medical care professionals to assess their motivation for international volunteer service
• Assisted in writing and poster preparation for presentation at a professional conference, and submission to professional journal

2002

Senior Project
Mood Dependent Memory: Does Mood Consistency Increase the Probability of Successful Recall of Externally Cued Memories

Undergraduate Department of Psychology
Western Washington University, Bellingham, Washington.
Supervisor: Louis Lippman, Ph.D.

Duties:
- Developed and conducted study including data collection and analysis for original research project used to meet the requirements for Bachelor of Arts degree in psychology

RELEVANT WORK/VOLUNTEER EXPERIENCE

May 2009 – July 2009  Psychology Technician
Private Practice, Forest Grove, Oregon
Supervisor: Susan Patchin, Psy.D.

Duties:
- Administered extensive cognitive, achievement, and neuropsychological battery to a college student suspected of having a learning disability
- Assessments also ruled our ADHD, depression, anxiety, and interpersonal relationship problems
- Scored assessments and determined if a learning disability was present; wrote a psychological report to that effect
- Received individual supervision as needed

2008-2009  Graduate Research Assistant
Psi Chi Research Journal & George Fox University
Newberg, Oregon
Supervisor: Chris Koch, Ph.D.

Duties:
- Assisted in editing the Psi Chi undergraduate research journal
- Corresponded with authors and reviewers as well as peer editing and reviewing manuscripts

Summer 2007 & 2008  Social Service Specialist 1: Child Abuse Hotline Screener
Oregon Department of Human Services, Child Welfare
Hillsboro, Oregon
Supervisor: Keri Manderfeld

Duties:
- Read police reports and identified individuals named therein
- Searched for identifying information within the Child Welfare database; summarized and articulated concerns to immediate supervisor and made collateral contacts
- Identified safety threats and cross-reported concerns of child abuse with law enforcement
Fall 2006  
**Depression Group Facilitator/Leader**  
*Depression Recovery presented via DVD by Dr. Neil Nedley, M.D., Newberg, Oregon*  
*Sponsor: Tami Rodgers, M.D.*  
*Duties:*  
- Co-facilitated depression recovery discussion group in a community-based, eight part, mental health education series via DVD using a practical workbook approach

2004-2006  
**Social Service Specialist 1: Caseworker**  
*Oregon Department of Human Services, Child Welfare Program, Beaverton, Oregon*  
*Sponsors: Patty Cooper, Cindy Eisenmeyer*  
*Duties:*  
- Provided support, case planning, and referrals to services for parents of children who have been removed from their custody due to the presence of safety threats  
- Provided oral and written reports to Juvenile Court regarding dependency issues  
- Identified risks and formulated safety plans to mitigate concerns while children remained or were returned to their parents’ homes  
- Served as legal guardian for children in substitute care  
- Conducted in-home visits with both parents and children

**TEACHING & SUPERVISION EXPERIENCE**

Sept. 2009-April 2010  
**Pre-practicum Graduate Assistant/Supervisor**  
*George Fox University, Newberg, OR.*  
*Sponsor: Mary Peterson, Ph.D.*  
*Duties:*  
- Supervised 5 pre-practicum students while they carried a client load of two undergraduate students each  
- Taught basic client-centered therapy skills  
- Responsible for weekly group supervision for therapeutic skill instruction via role-plays, videotape review, and group discussion  
- Met with students individually to review their videotaped therapy sessions and provided feedback in regards to their general professional development  
- Provided feedback to supervisor on students that generally involved personal growth and exploration of skill progression  
- Received weekly group supervision from Dr. Peterson with 3 other pre-interns
Sept. 2009-April 2010  Clinical Oversight  
**George Fox University, Newberg, OR.**  
*Supervisors:* Winston Seegobin, Ph.D.& Mary Peterson, Ph.D.  
*Duties:*  
- Experiential component of Pre-intern Supervision course  
- Supervise one Practicum I student and two Pre-Practicum students  
- Meet with students weekly to discuss initial practicum experiences  
- Prepare students for formative and summative evaluations in the areas of history gathering, mental status exams, differential diagnosis, and case conceptualization

Nov. 2009  Guest Lecturer: Graduate Level Clinical Foundations Class – George Fox University, Newberg, OR.  
*Professor:* Mary Peterson, Ph.D.  
*Multicultural Considerations in Therapy*

May 2009  Guest Lecturer: Graduate Level Behavioral Interventions Class – George Fox University, Newberg, OR.  
*Professor:* Elizabeth Hamilton, Ph.D.  
*Topic:* “Using Social Rhythm Therapy as a Behavioral Intervention to Treat Bipolar Disorder.”

Fall 2008 & Spring 2009  Part-time Faculty: Psych 201: General Psychology, Biological Emphasis  
**Chemeketa Community College, McMinnville, OR.**  
*Supervisor:* John Plett  
*Duties:*  
- Taught 3-credit course which focused on psychology as a science stressing history, methodology, the biological foundations of behavior, human development, sensation, and perception  
- Planned course content, writing syllabus, preparing and presenting weekly lectures and activities, and assessment of student performance

Winter 2009  Part-time Faculty: Psych 202: General Psychology, Cognitive Emphasis  
**Chemeketa Community College, McMinnville, OR.**  
*Supervisor:* John Plett  
*Duties:*  
- Taught 3-credit course which presented an overview to the operation of cognitive processes  
- Included principles of learning, memory, cognition, motivation, emotion, and stress  
- Planned course content, writing syllabus, preparing and presenting weekly lectures and activities, and assessment of student performance
Fall 2008  
**Teaching Assistant: Advanced Counseling**  
**George Fox University, Newberg, OR.**  
**Supervisor:** Kristina Kays, Psy.D.  
**Duties:**  
- Supervised senior undergraduate psychology students in the development and implementation of therapeutic skills  
- Led weekly groups that used role-play and dyads/triads to teach students to expose them to foundational clinical skills

**RELATED PROFESSIONAL TRAININGS AND WORKSHOPS**

- Psychological Treatment with American Indian Populations  
  with Dr. Tammy Greer, Ph.D.  
  November 2010
- Patient Centered Care  
  with Laura Krejci, MSW  
  November 2010
- Consultation with Psychologists from an Emergency Department  
  Physician’s Perspective  
  with Dr. John Mitchell, MD  
  November 2009
- Pain: Medical, Psychological, and Psychoanalytic Perspectives  
  with Dr. Marilyn S. Jacobs, Ph.D./ABPP  
  September 2009
- Motivational Interviewing: Health Behavior Change, Diabetes  
  with Dr. Michael Fulop, Psy.D.  
  May 2009
- Working with Lesbian, Gay, Bisexual (LGB) Clients: Suggested Topics with Dr. Carol Carver, Ph.D.  
  May 2009
- Introduction to TEACCH (Treatment and Education of Autistic and Communications- Handicapped Children) program  
  with Dr. Gary Mesibov, Ph.D.  
  April 2009
- Basic Course in Clinical Hypnosis. Oregon Society of Clinical Hypnosis  
  February, March 2009
- “Battling the Ghosts of War.” Dr. David Kinzie, M.D. – Director, Intercultural Psychiatric Program, Oregon Health and Sciences University (OHSU) & the Torture Center of Oregon  
  February 2009
- Primary Care Psychology. Dr. Julie Oyemaja, Psy.D. – Behavioral health program coordinator; Lifeworks/ Virginia Garcia health centers  
  November 2008
- Towards a Global Christian Psychology: Re-considering Culture and Context. Dr. J Derek McNeil  
  October 2008
- APA Behavior Social Science Volunteer (BSSV) Basic Training, New Orleans, LA.  
  October 2008
- Assessing Competence of Adults and Youth in Conflict with the Law with Dr. Ron Roesch, Ph.D.  
  August 2008
Writing and APA Workshop for Graduate Students with Dr. Jill Kelly, Ph.D.  February 2008
Halting the Epidemic of Diabetes and Heart Disease with Dr. David Barker, M.D.  February 2008
The Psychology of Forgiveness in Clinical Practice: The Benefits and Pitfalls of Helping Clients Forgive with Dr. Nathaniel G. Wade, Ph.D.  February 2008
Competency Evaluations with Dr. Daniel Smith, Psy.D.  November 2007
Risk Assessment with Dr. Elena Balduzzi, Psy.D. and Dr. Alex Millkey, Psy.D.  November 2007
Writing and APA Workshop for Graduate Students with Dr. Jill Kelly, Ph.D.  March 2007
Motivational Interviewing with Dr. William R. Miller, Ph.D.  October 2006

PROFESSIONAL AFFILIATIONS

2009 – present   APA Division 38, Health Psychology (Student Affiliate)
2009 – present   APA Division 52, International Psychology (Student Affiliate)
2009 – present   Oregon Psychological Association (Student Affiliate)
2007 – present   Psi Chi National Honor Society
2006 – present   American Psychological Association (Student Affiliate)

UNIVERSITY INVOLVEMENT

2008-2010   **Elected position: At-large student body representative to student council:** Participate in bi-monthly student council meetings and participate on the community care and accreditation committees.

2009& 2010  **Prospective Student Interviewer:** Selected by faculty to assist in interviewing George Fox University prospective doctorate of psychology students. Duties: With a faculty member, interview prospective students, rate quality of student responses, and give opinion to faculty.

2007-2009  **Peer Mentor:** Mentored two first-year doctoral students in the Graduate Department of Clinical Psychology at George Fox University.

2007  **Legislative Advocacy:** Met with legislators on behalf of the Oregon Psychological Association to discuss prescriptive authority, and the state budget as it relates to mental health.
REFERENCES

Dr. Linda Cox, Ph.D.
Supervisory Psychologist/ Clinical Coordinator PRRTP
VA Gulf Coast Veterans Health Care System
400 Veterans Avenue
Biloxi, MS 39531

Dr. Tamara Hoogestraat, Psy.D.
Oregon Health & Science University (OHSU)
Family Medicine at Richmond
3930 SE Division Street
Portland, OR 97202

Dr. Mary Peterson, Ph.D.
Director of Clinical Training/Associate Professor
Graduate Department of Clinical Psychology
414 North Meridian Street
Newberg, OR 97132
(503) 554-2763

Dr. Kara Vick, Ph.D.
PTSD Intensive Outpatient Program (IOP) Psychologist
VA Gulf Coast Veterans Health Care System
400 Veterans Avenue
Biloxi, MS 39531